<u>1/2 SIZE</u>

- 10.2 Inlets, Special
- 11.2 Inlets, Special (Type A Gutter)
- 12.2 Double Inlet, Special
- 13.2 Frame & Grate for Inlets, Special
- 13.2a Frame & Grate for Inlets, Special
- 13.2b Frame & Grate for Inlets, Special
- 13.2c Frame & Grate for Inlets, Special
- 13.2d Frame & Grate for Inlets, Special
- 14.2 Inlets, Special, No. 1
- 15.2 Inlets, Special, No. 2
- 20.2 Standard Inlet for Type A Gutter (Special)
- 21.2 Standard Inlet for Curb & Gutter
- 30.2 Field Tile Junction Vaults 2' and 3' Dia.
- 31.2 Treatment of Field Tile Systems Under Ditches
- 32.2 Sign Panel Type 1 (Special)
- 33.2 Special Drainage Outlet
- 34.2 Inlet Stand Pipe
- 35.2 Guardrail Erosion Control Treatments
- 36.2 Paved Ditch (Special)
- 37.2 Underdrain for Across Road (AR) Culverts
- 44.2 Reserved Parking Sign Detail
- 45.2 Superelevation Transition on Two-Lane Highway
- 46.2 Hot-Mix Asphalt Approaches and Mailbox Returns for Single Lift (SMART) Resurfacing Projects
- 47.2 Hot-Mix Asphalt Approaches and Mailbox Returns for Two Lifts (3P) Resurfacing Projects
- 48.2 Safety Edge (SMART Projects)
- 49.2 Safety Edge (3P Projects)
- 61.2 Slotted Drain Pipe for Type A Gutter (Special)
- 63.2 Pipe Handrail for Steps
- 64.2 Pipe Handrail, Special for Retaining Walls
- 66.2 Permanent Survey Markers, Type II
- 73.2 Automatic Flap Gate
- 81.2 Riprapped Culvert Energy Basin
- 89.2 Termination of Dead End Roads
- 90.2 Mechanical Joints for Concrete Pipe and Box Culverts
- 93.2 Typical Aggregate Base Sideroad
- 94.2 Traffic Control & Protection at Turn Bays (To Remain Open to Traffic)

1/2 Size District 2 Standards

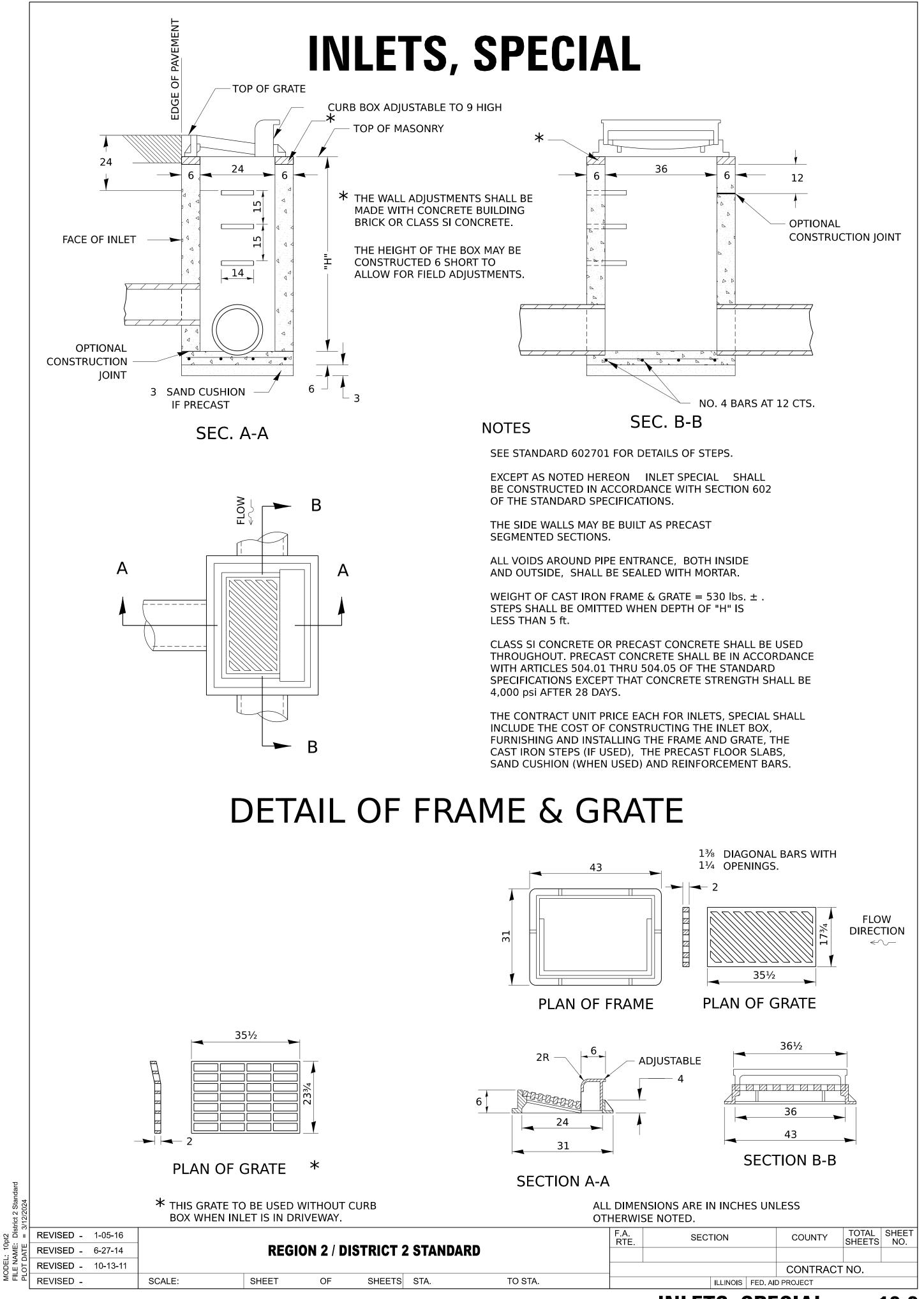
10.2	This is used for drainage in a curb & gutter section. The diagonal grate is included in the cost. The diagonal grate is bicycle safe. If the inlet is in a driveway which has a depressed curb, the grate on the bottom left hand side will be used. The cost of this grate is also included in the cost of the inlet special. When using this do not include 13.2, 13.2a, 13.2b, 13.2c or 13.2d.
11.2	This is used for drainage in a Type A gutter. The grate is included in the cost of the inlet.
12.2	This is used when extra inlet capacity is needed. For example, in a sag condition.
13.2 13.2a 13.2b 13.2c 13.2d	These are different types of frame & grates for inlet specials. One of these can be used to replace broken frame & grates on inlets to be adjusted or reconstructed. Select the one that matches the existing. All of them are bicycle safe.
14.2	This has been used in medians where the gutter flag is less than 24".
15.2	This has been used in medians where the curb is only 2° + high. For example, near the nose of a ramped median.
20.2	Use this on the inlet end of Type A Gutter (Special)
21.2	Use this on the inlet end of Combination Concrete Curb & Gutter
30.2	If there is existing field tile on your job or think there could be field tile, include this standard. Also include a pay item for junction vaults.
31.2	If there is storm sewer or field tile under a ditch with 24" or less of cover, include this standard. Include the pay item for Miscellaneous Concrete.
32.2	Use this where the bridge is less than 24" wider than the roadway surface. This is very rare on a state route, but should be used on bridges on detour routes on County or Township roads.
33.2	This is a special drainage outlet to be used on existing pavements with drainage problems. The existing underdrains might not be working, or there is water pumping out of the joint between the pavement and shoulder.
34.2	This can be used to replace existing field tile stand pipes. The existing stand pipe is usually an orange perforated 6" pipe, 24" to 36" high, near the outlet end of a culvert. This could also be a new installation if requested by the property owner during Phase I or during negotiations.

District 2 Standards Designer Notes

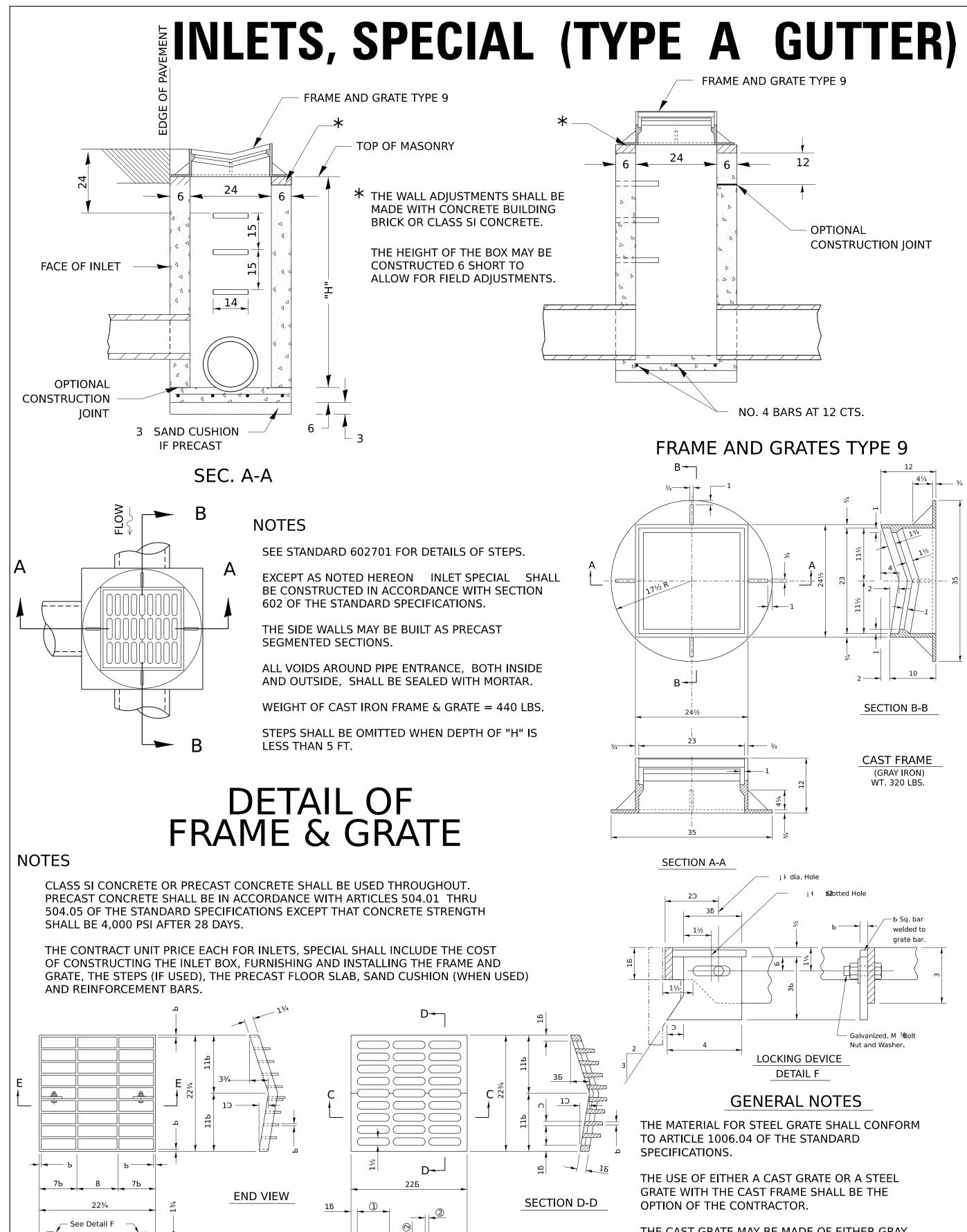
- 35.2 This is an erosion control treatment at guardrail that Operations has used for years. The downside is the erosion control curb tends to further tilt the guardrail over time. This can be used to replace existing erosion control curb or at selected locations. A better treatment for slopes at guardrail is Perimeter Erosion Barrier, Special (Dist. Std. 8.4).
- 36.2 Paved ditch is rarely used in District 2. It tends to crack and water seeps under the concrete, causing it to be undermined. Once undermined it collapses, causing an erosion problem. Where it can be used is on very flat ditch grades, less than 0.2%. In this case, velocity is low, but the paved ditch could silt in. Operations could clean the paved ditch and the paved ditch establishes the grade line.
- 37.2 Include when installing or removing across road culverts in sags or on grades greater than 2%. The purpose of this is to prevent water pumping out of the joints of the pavement patch. Add the pay items for Pipe Underdrains, Type 2 and Concrete Headwalls for Pipe Drains.
- 44.2 This is to be used on all disabled parking stalls.
- 45.2 Include this on projects that correct existing superelevations, or on new pavements on superelevations. Not to be used on 3P or Smart projects because existing superelevations are not changed.
- 46.2 Include this on all Smart resurfacing projects.
- 47.2 Include this on all 3P resurfacing projects.
- 48.2 Include in Smart resurfacing projects with paved shoulders 3' or less.
- 49.2 Include in 3P resurfacing projects with paved shoulders 3' or less.
- 60.2 Deleted 4-15-15
- 61.2 This can be used to increase drainage in curb & gutter or Gutter, Type A (Special) where the longitudinal grade is less than 0.3%. Use 68.1 when constructing median crossovers.
- 63.2 Include this when constructing new steps.
- 64.2 Include this when handrails are needed on retaining walls. Not all retaining walls need handrails. Retaining walls that are supporting and adjacent to sidewalks or parking lots usually need a handrail. Landscaping walls to retain earth in front of a house usually don't need handrails.

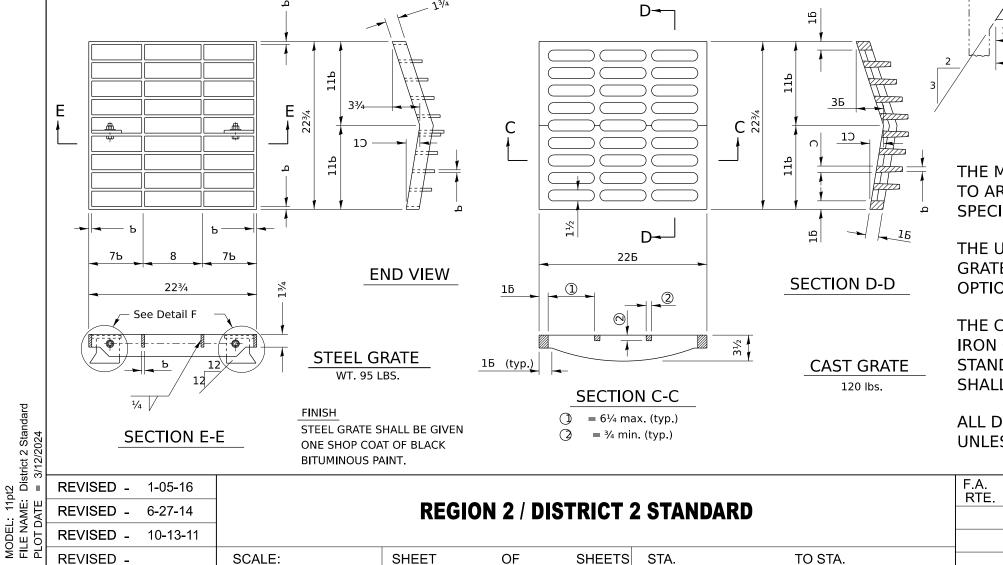
District 2 Standards Designer Notes

- 66.2 Include this when using the pay item for Permanent Survey Marks. Do not include Highway Standard 667101 because Standard 66.2 is 5' deep and requires a witness marker.
- 73.2 Use this on entrance pipes or berm pipes adjacent to a river or canal. This will prevent water from the river or canal backing up into the ditch.
- 81.2 This is one option to control erosion at the ends of culverts with very high velocities. There is a design process to determine the dimensions in the chart. Consult with the Hydraulics Engineer on its use.
- 89.2 Include this at the end of dead end roads like a cul-de-sac or hammer head turn around.
- 90.2 Use this at locations where pipe culverts or box culvert joints could separate. Most culverts do not require the ties, so this is rarely used. One application is where the culvert outlets into a river. There could be erosion at the end of the culvert so the end section or sections of the culvert could tip or fall off. In this case, only the last one or two sections were tied.
- 93.2 Include this when sideroads are constructed with 3"± of incidental on an aggregate base and the mainline has 8" HMA shoulders. This standard includes 4' HMA shoulders on the sideroad return, which will be placed monolithically when the return is resurfaced.
- 94.2 Include this on multi-lane roads when the traffic lane is closed adjacent to a <u>left</u> or <u>right</u> turn lane and the turn lane is to remain open to traffic.



INLETS, SPECIAL



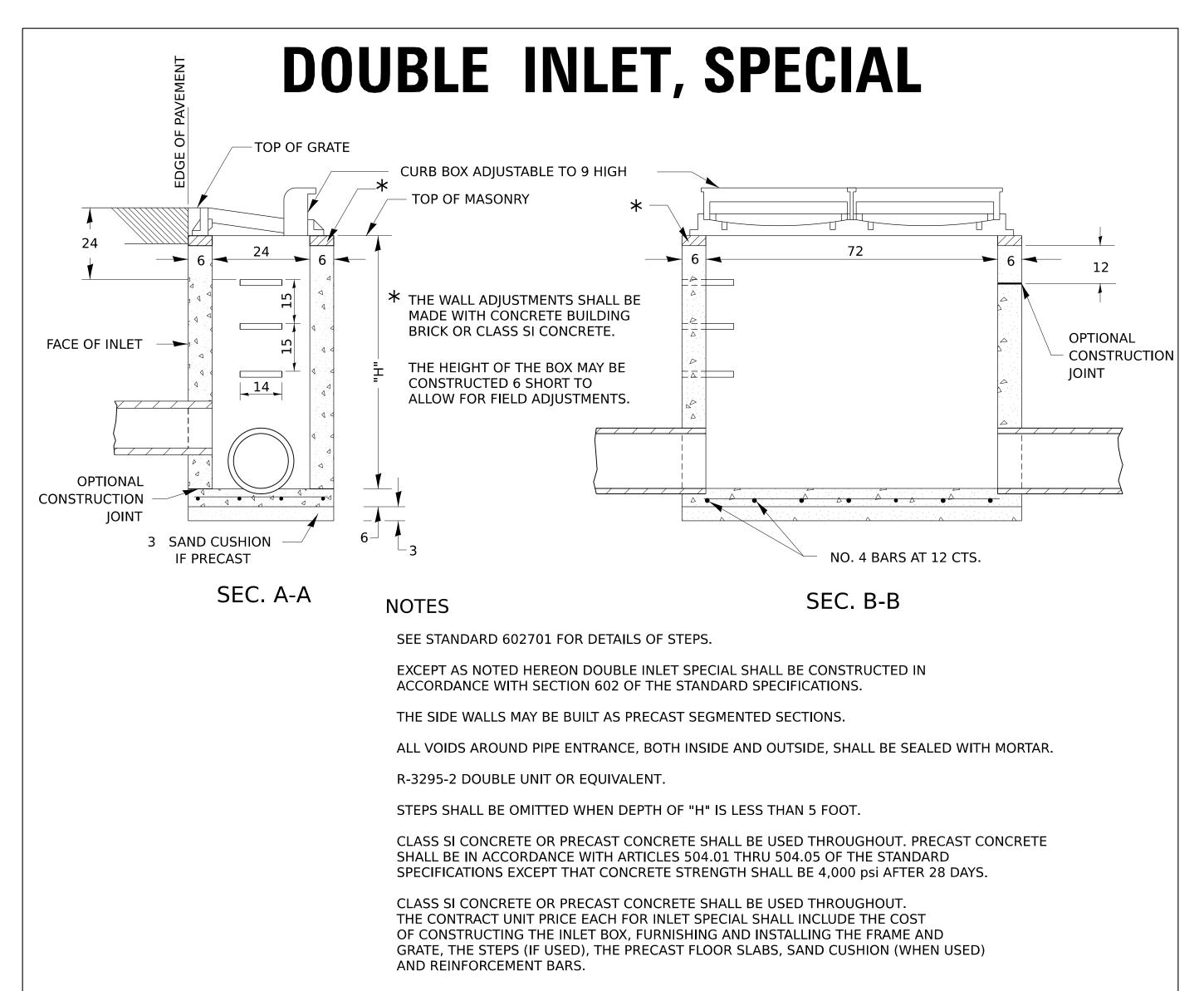


THE CAST GRATE MAY BE MADE OF EITHER GRAY IRON OR DUCTILE IRON CONFORMING TO THE STANDARD SPECIFICATIONS. DUCTILE IRON CASTING SHALL BE GRADE 65-45-12

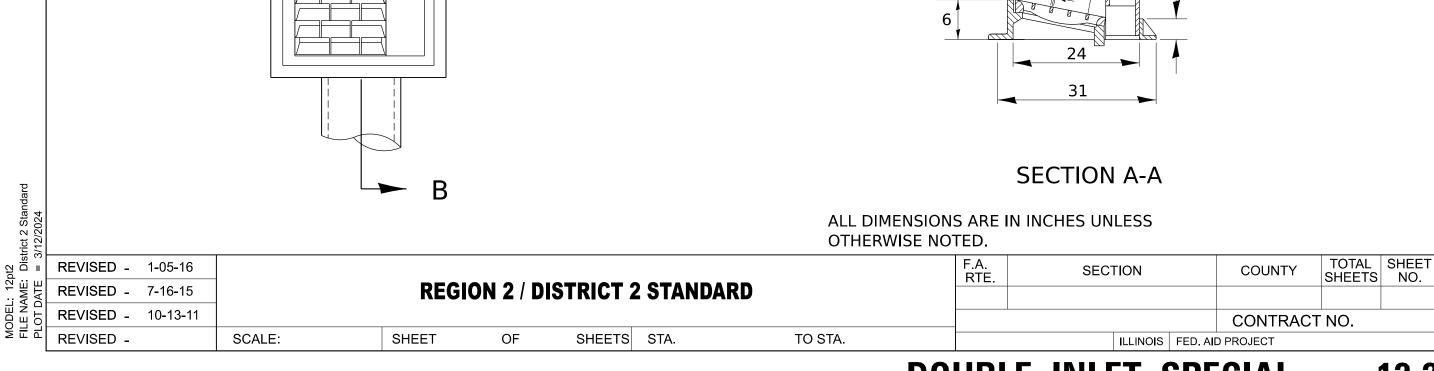
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

TOTAL SHEET SHEETS NO. COUNTY SECTION CONTRACT NO. SHEET OF SHEETS STA. TO STA. SCALE: ILLINOIS FED. AID PROJECT

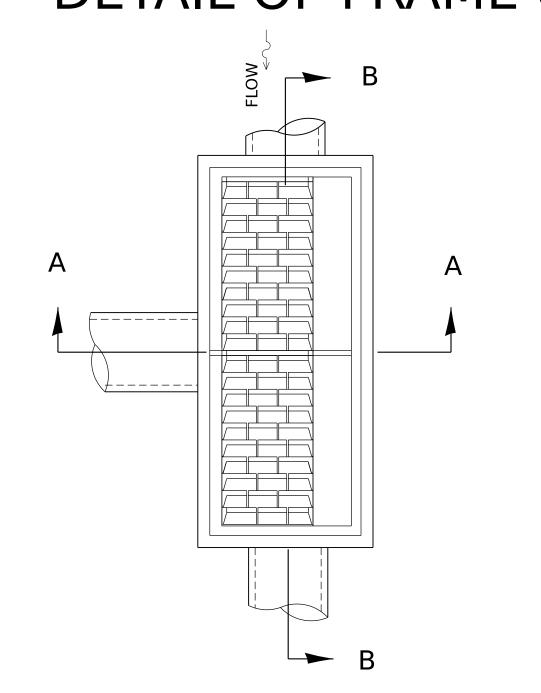
INLETS, SPECIAL (TYPE A GUTTER) 11.2

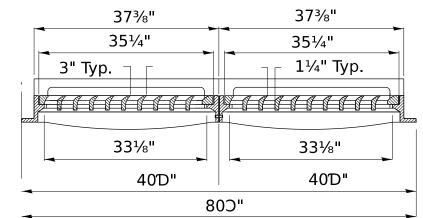


DOUBLE INLET, SPECIAL 12.2



DETAIL OF FRAME & GRATE



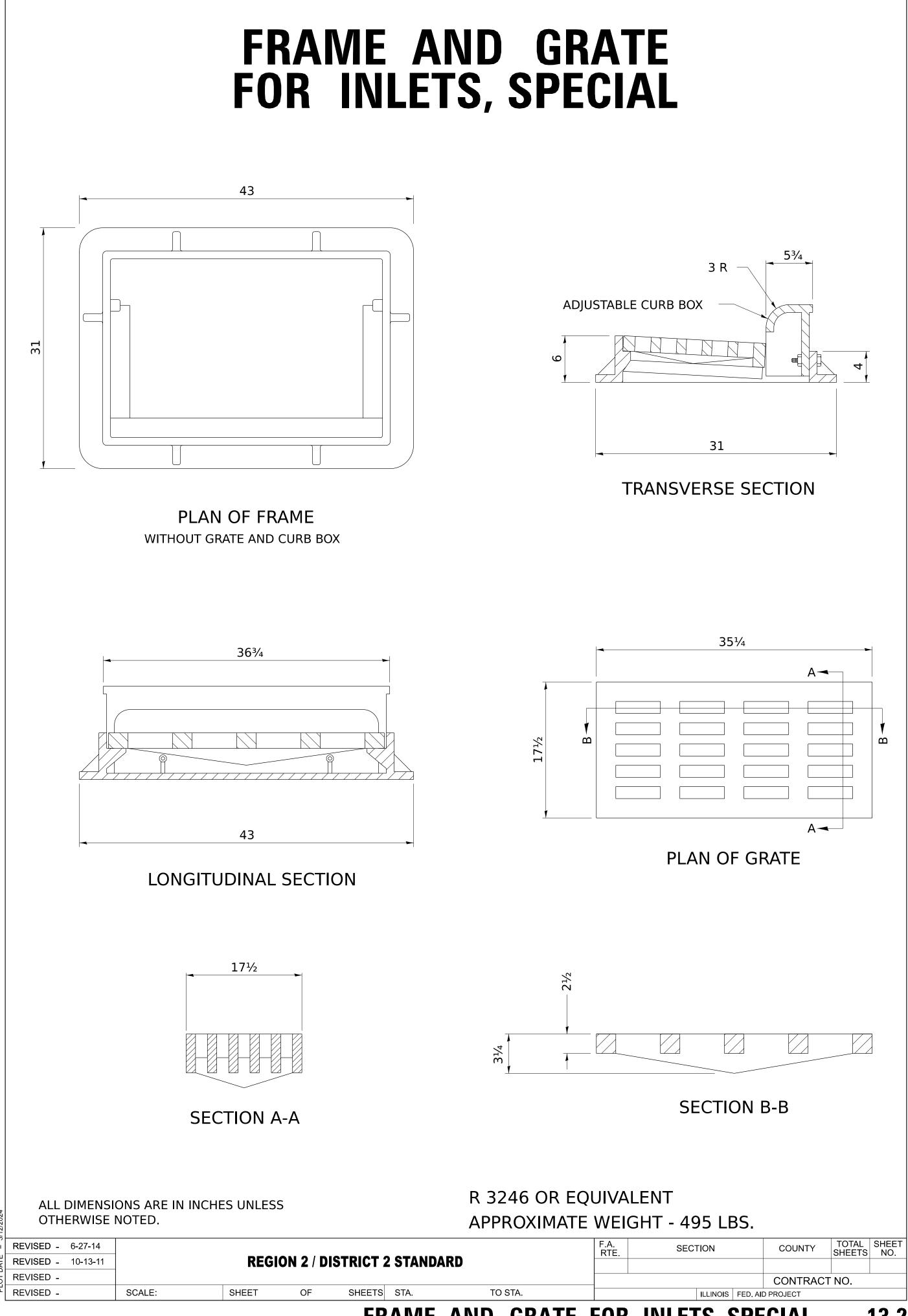


SECTION B-B

17¾"

2"R

5¾'

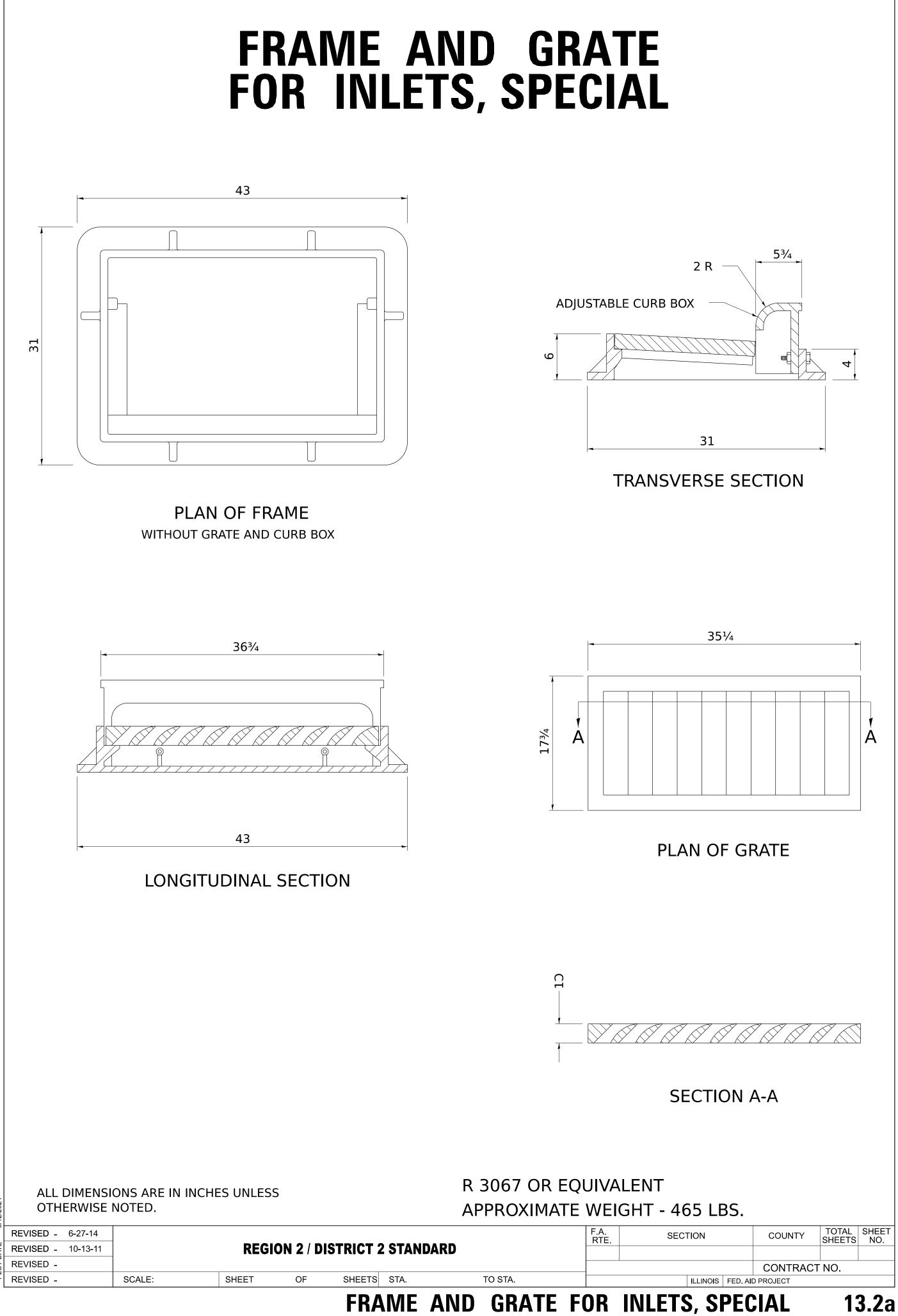


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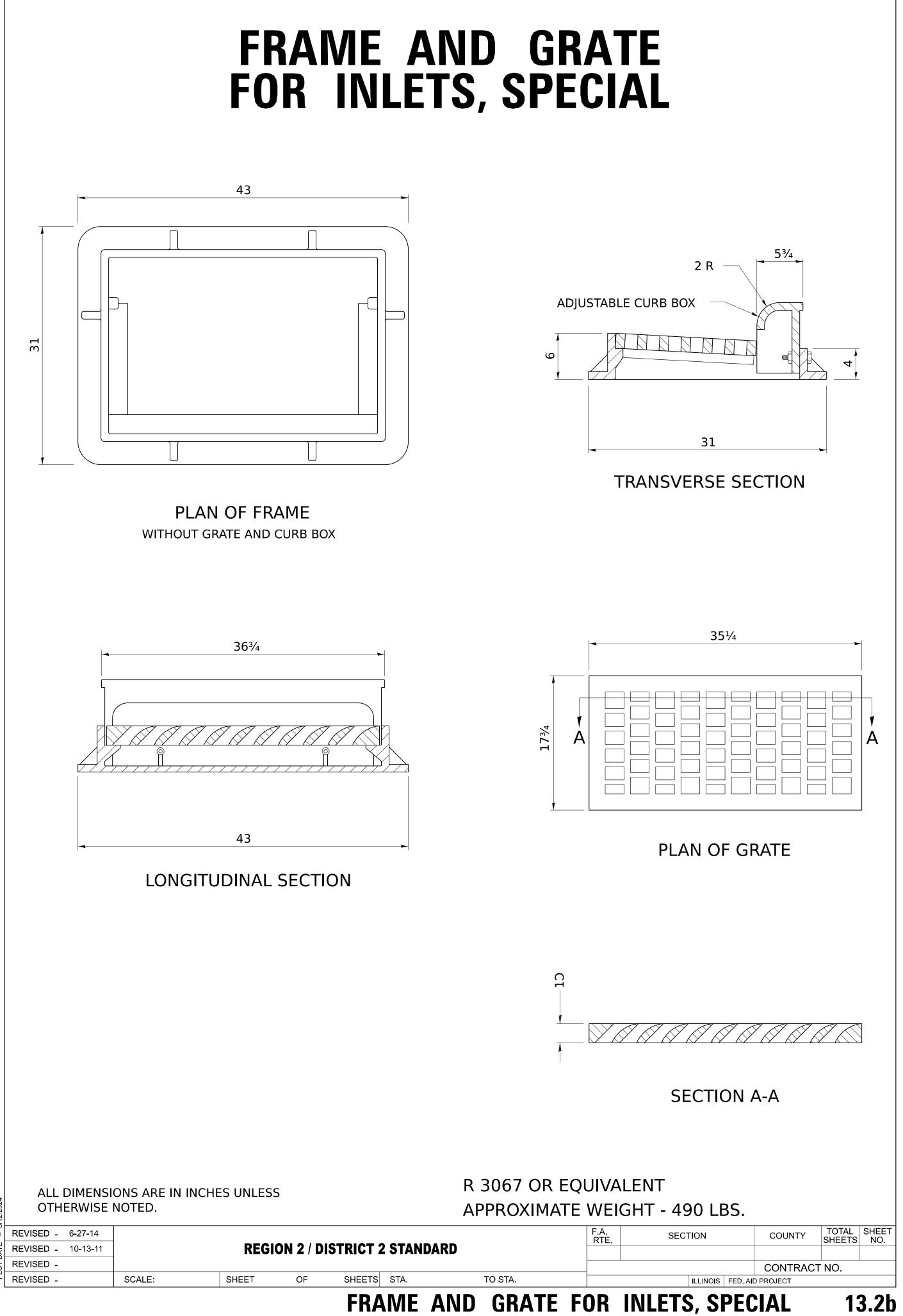
MODEL: 13pt2 FILE NAME: Dis

FRAME AND GRATE FOR INLETS, SPECIAL 1



ndard MODEL: 13pt2a FILE NAME: District 2 Star

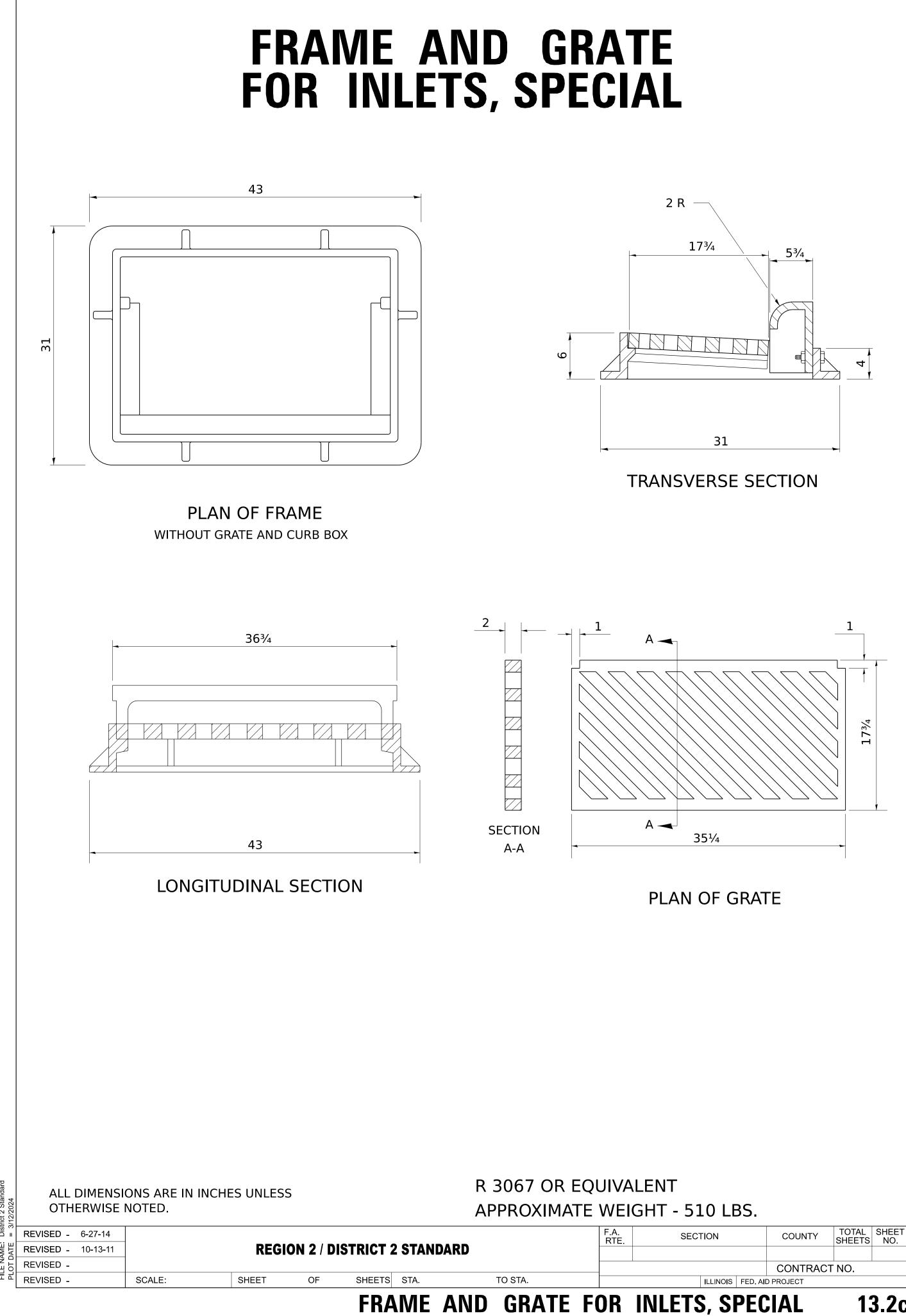
13.2a



idard

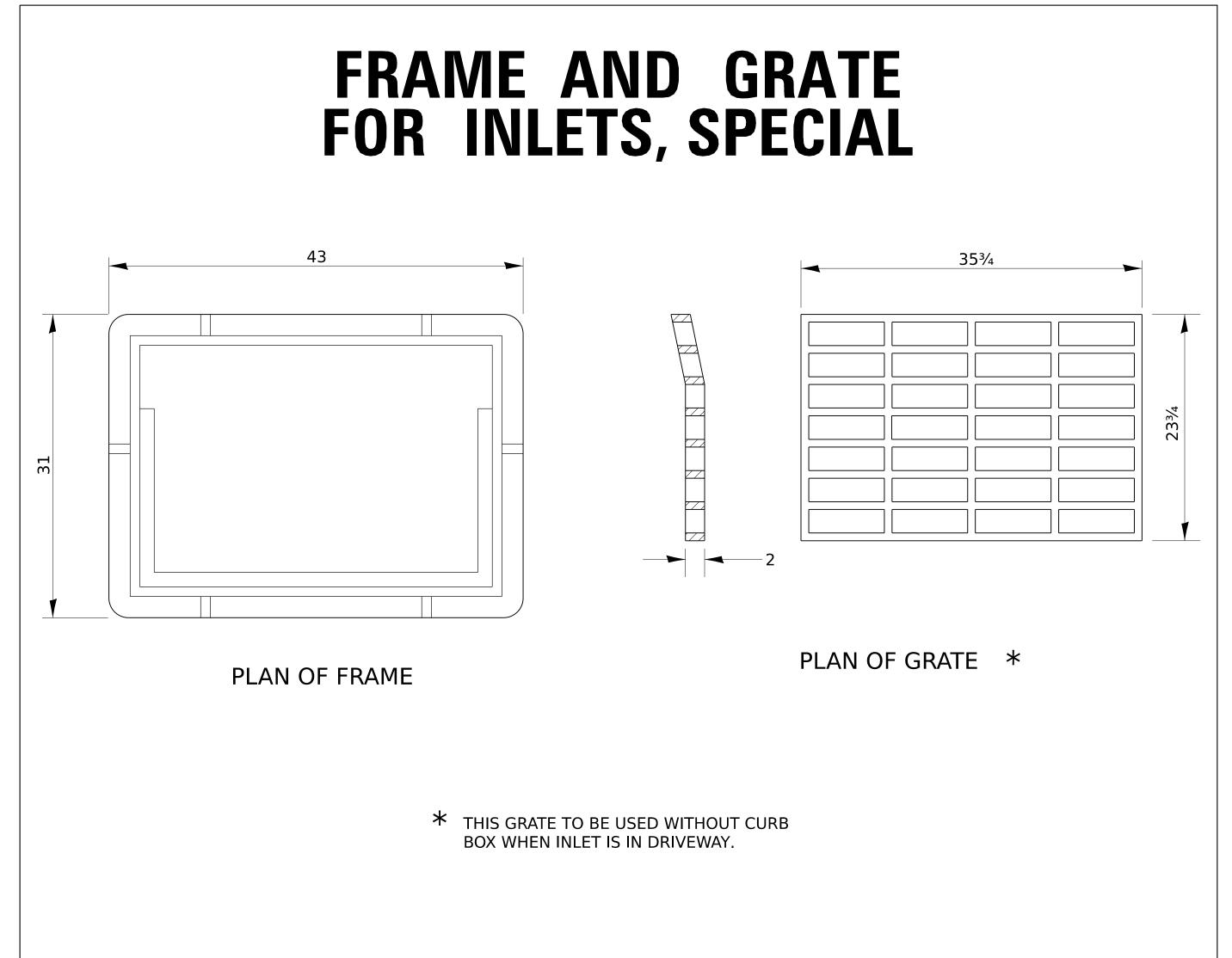
rict 2 Star

MODEL: 13pt2b FILE NAME: Dist



ndard MODEL: 13pt2c FILE NAME: District 2 Star

13.2c

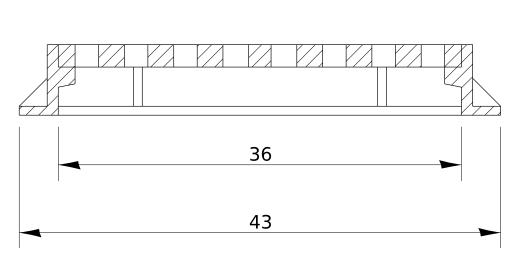


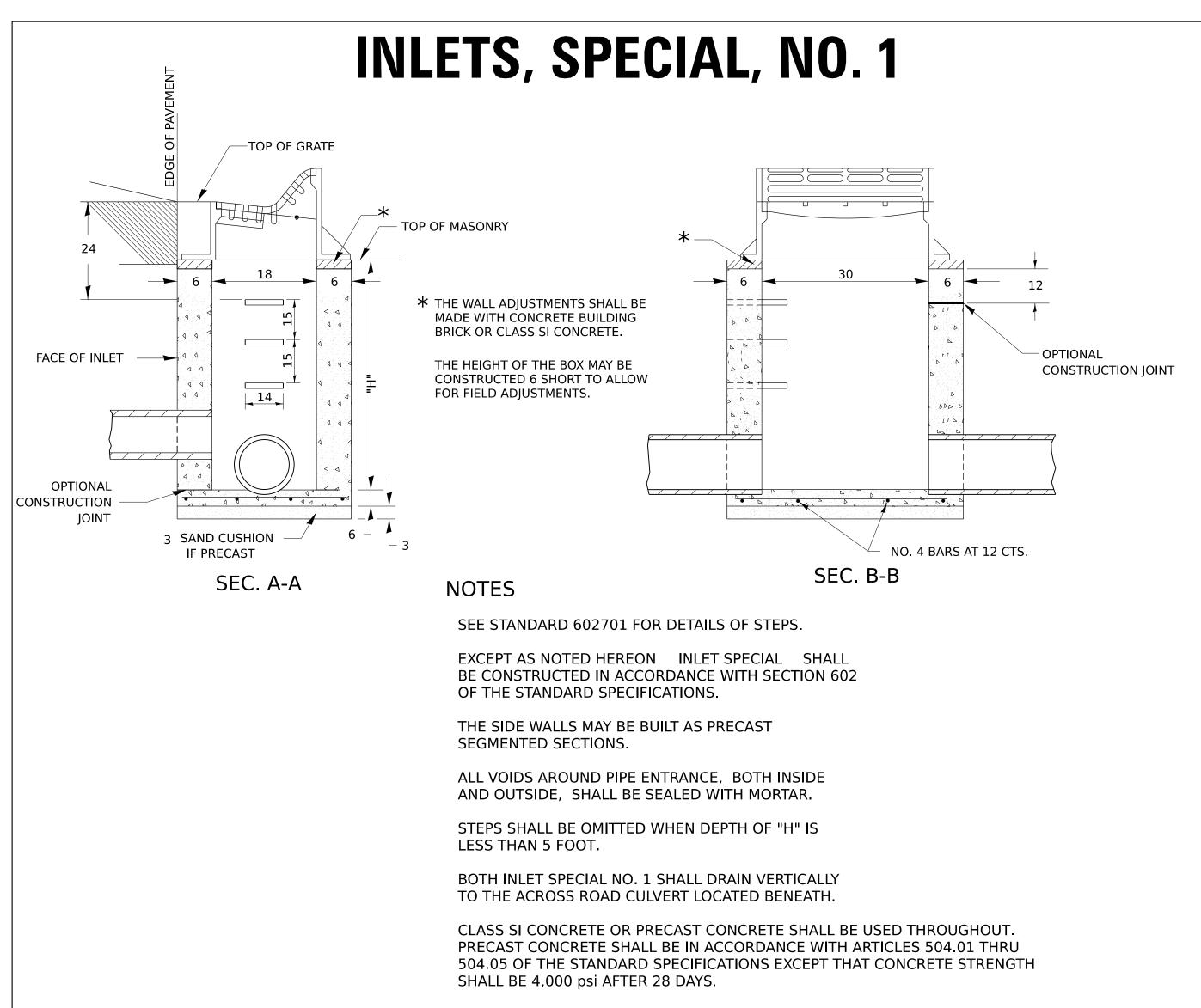
FRAME AND GRATE FOR INLETS, SPECIAL **13.2d**

ict 2 Standard 12/2024		8290-A OR PROXIMAT	•		AST IR	ON FRA	ME & GRATE - 5	530 LB	S.		
pt2d Distr = 3/	REVISED - 4-14-15							F.A. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
- 13 AME DATE	REVISED - 6-27-14		REGI	ON 2 / D	ISTRICT 2	2 STANDA	RD				
MODEL: 13p FILE NAME: PLOT DATE	REVISED - 10-14-11									CONTRACT	NO.
ž E Z	REVISED -	SCALE:	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. AI	D PROJECT	
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APPROXIMATE WEIGHT OF CAST IRON FRAME & GRATE - 530 | BS

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.



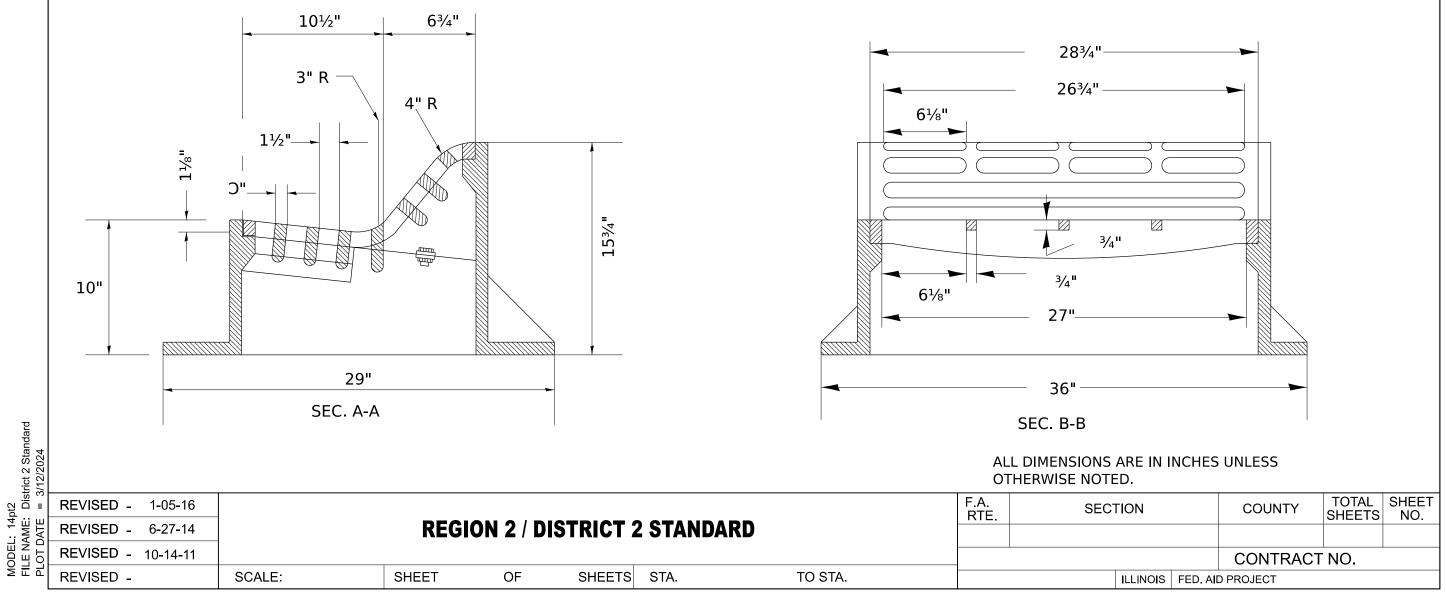


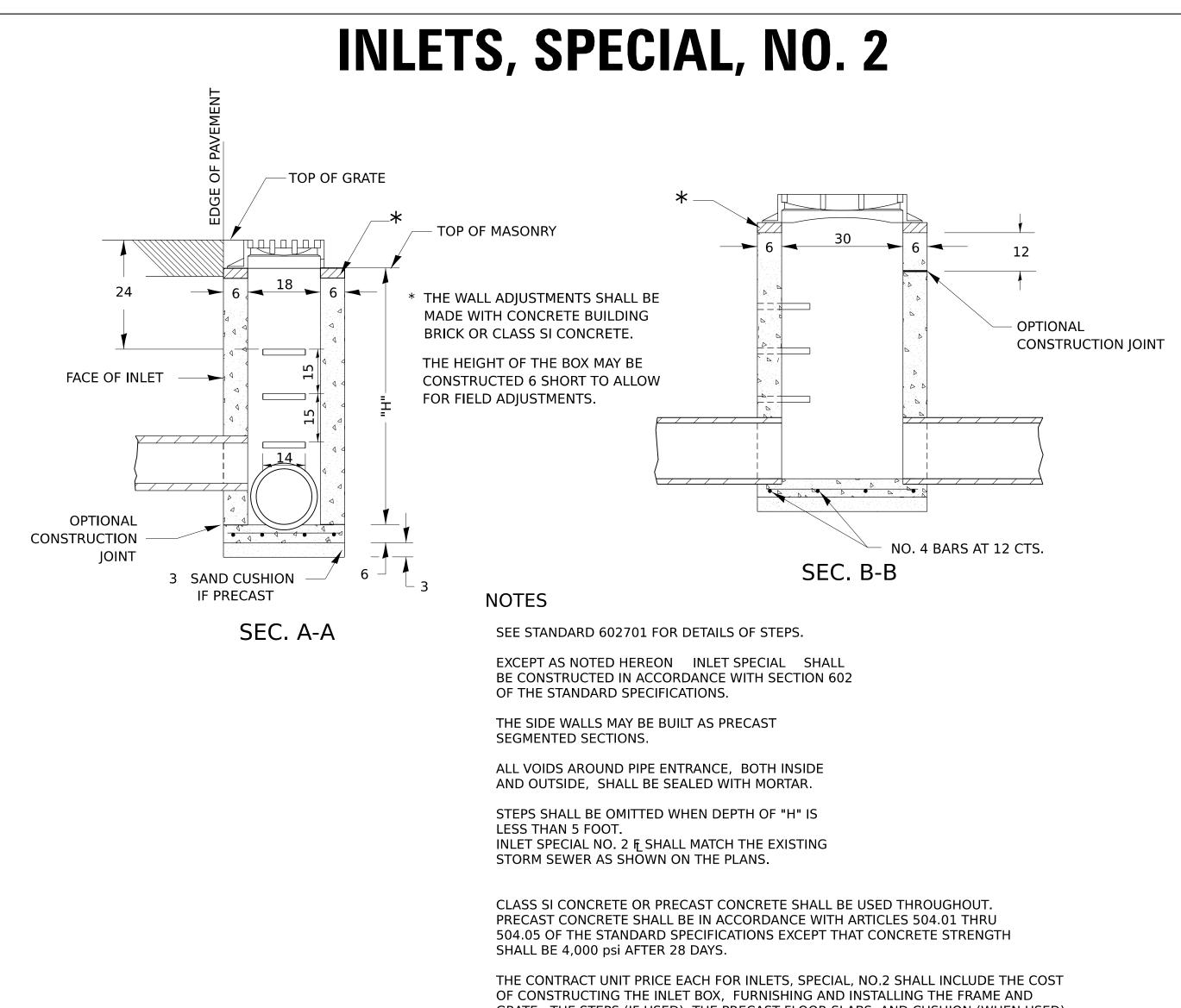
THE CONTRACT UNIT PRICE EACH FOR INLETS, SPECIAL, NO.1 SHALL INCLUDE THE COST OF CONSTRUCTING THE INLET BOX, FURNISHING AND INSTALLING THE FRAME AND GRATE, THE STEPS (IF USED), THE PRECAST FLOOR SLABS, SAND CUSHION (WHEN USED) AND REINFORCEMENT BARS.

INLETS, SPECIAL, NUMBER 1

FRAME AND GRATE # R-3503-B OR EQUIVALENT

DETAIL OF FRAME & GRATE

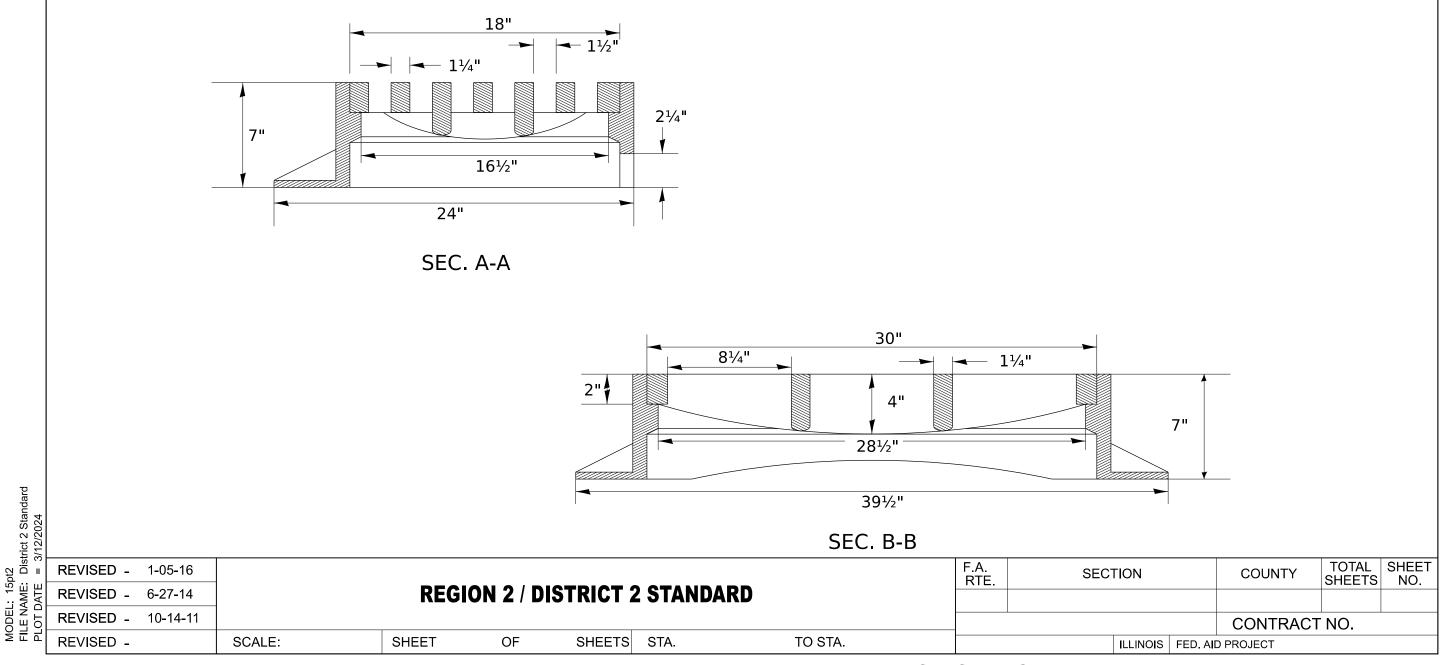




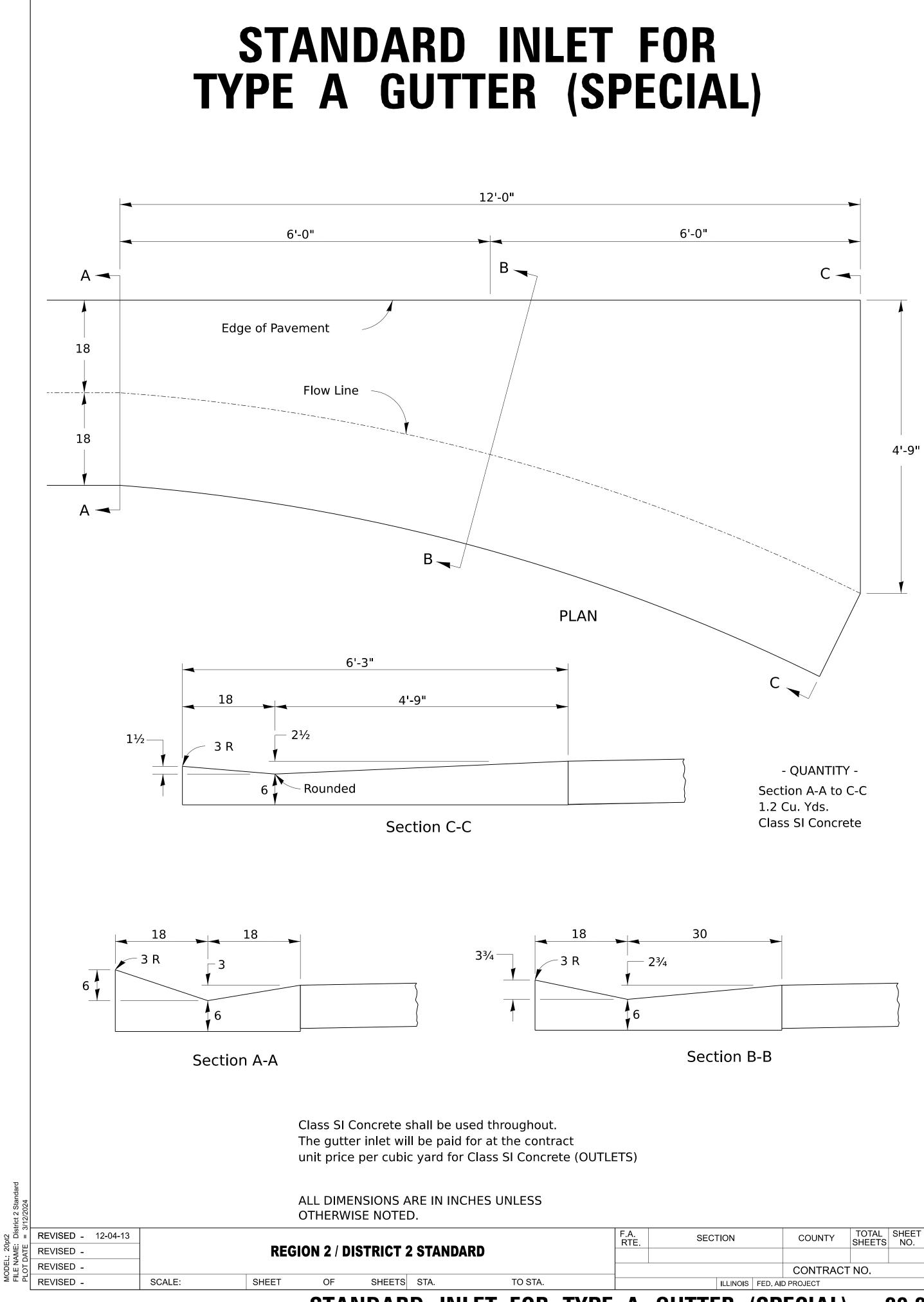
GRATE, THE STEPS (IF USED), THE PRECAST FLOOR SLABS, AND CUSHION (WHEN USED) REINFORCEMENT BARS, AND REMOVAL OF ANY EXCESS STORM SEWER.

FRAME AND GRATE # R-3461 OR EQUIVALENT

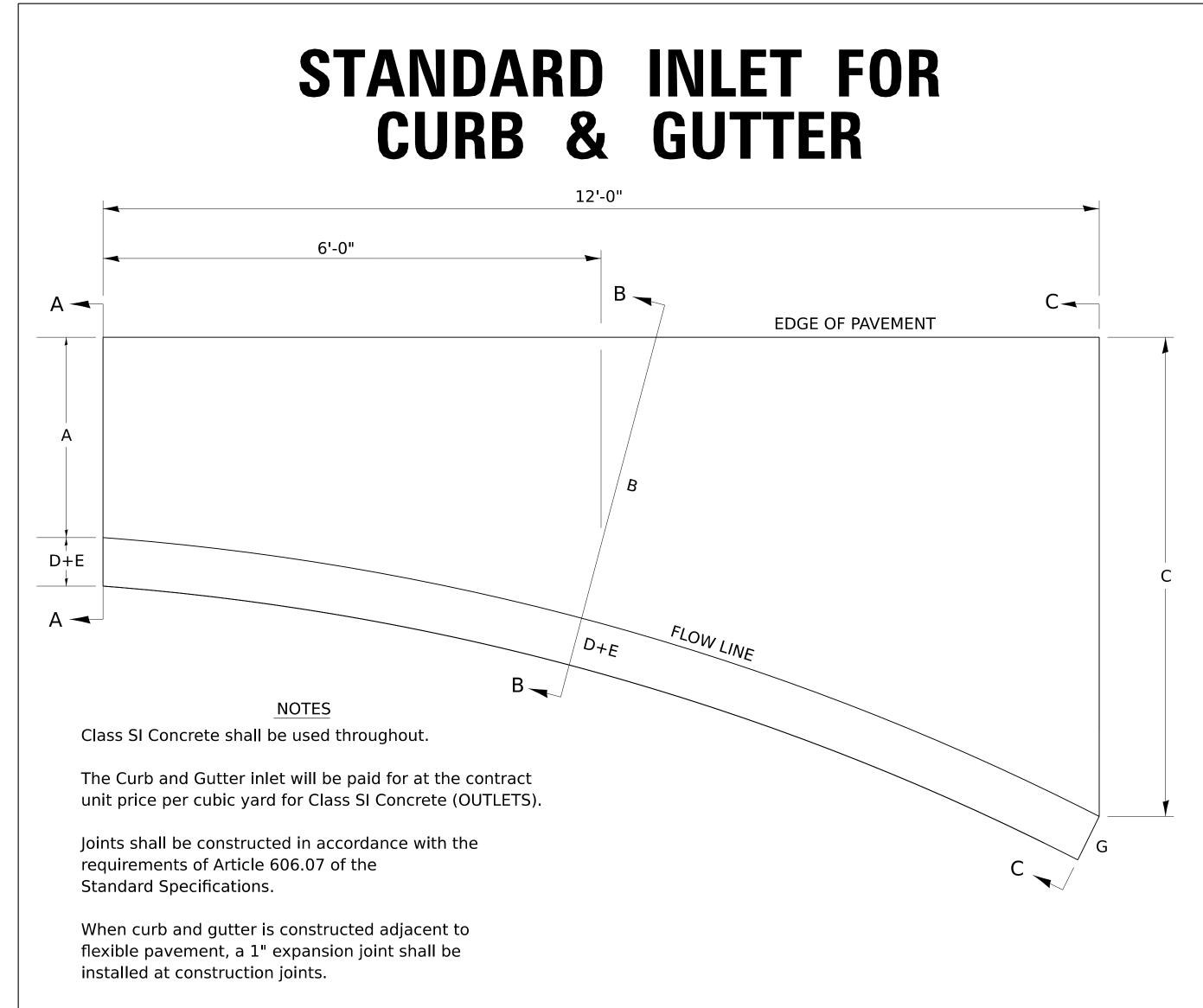




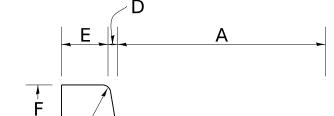
INLETS, SPECIAL, NUMBER 2 15.2

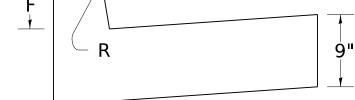


STANDARD INLET FOR TYPE A GUTTER (SPECIAL)

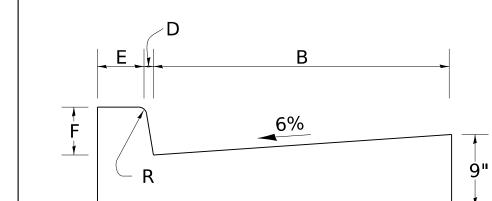


All dimensions are in inches unless otherwise noted.





SECTION A-A



									1
									CONCRETE
TYPE OF		Т	ABLE OF	DIME	INSIO	NS			QUANTITY
CURB &									A-A TO C-C
GUTTER	Α	В	С	D	E	F	G	R	(CU YDS)
B-6.06	6	15	4'	1	6	6	7	1	0.87
B-6.12	12	18.25	4'	1	6	6	7	1	0.95
B-6.18	18	27.25	4' 9"	1	6	6	7	1	1.18
B-6.24	24	32.4	4' 9"	1	6	6	7	1	1.30
M-4.06	6	17.8	3' 9"	4	3	4	7	3	0.75
M-4.12	12	18.25	4'	4	3	4	7	3	0.91
M-4.18	18	27.25	4' 9"	4	3	4	7	3	1.14
M-4.24	24	32.4	4' 9"	4	3	4	7	3	1.25
M-6.06	6	17.8	3' 9"	6	2	6	8	3	0.86
M-6.12	12	18.25	4'	6	2	6	8	2	0.96
M-6.18	18	27.25	4' 9"	6	2	6	8	2	1.20
M-6.24	24	32.4	4' 9"	6	2	6	8	2	1.30
		G.			С				
			- 11/2"						9"

SECTION C-C

INLET FOR CURB & GUTTER

F.A. RTE.

SECTION B-B

SCALE:

TO STA.

8-27-13

10-10-06

REVISED - 11-12-14

REVISED -

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strict 2 Standard

MODEL: 21pt2 FILE NAME: Dis

OF

SHEET

REGION 2 / DISTRICT 2 STANDARD

SHEETS STA.

STANDARD

ILLINOIS FED. AID PROJECT

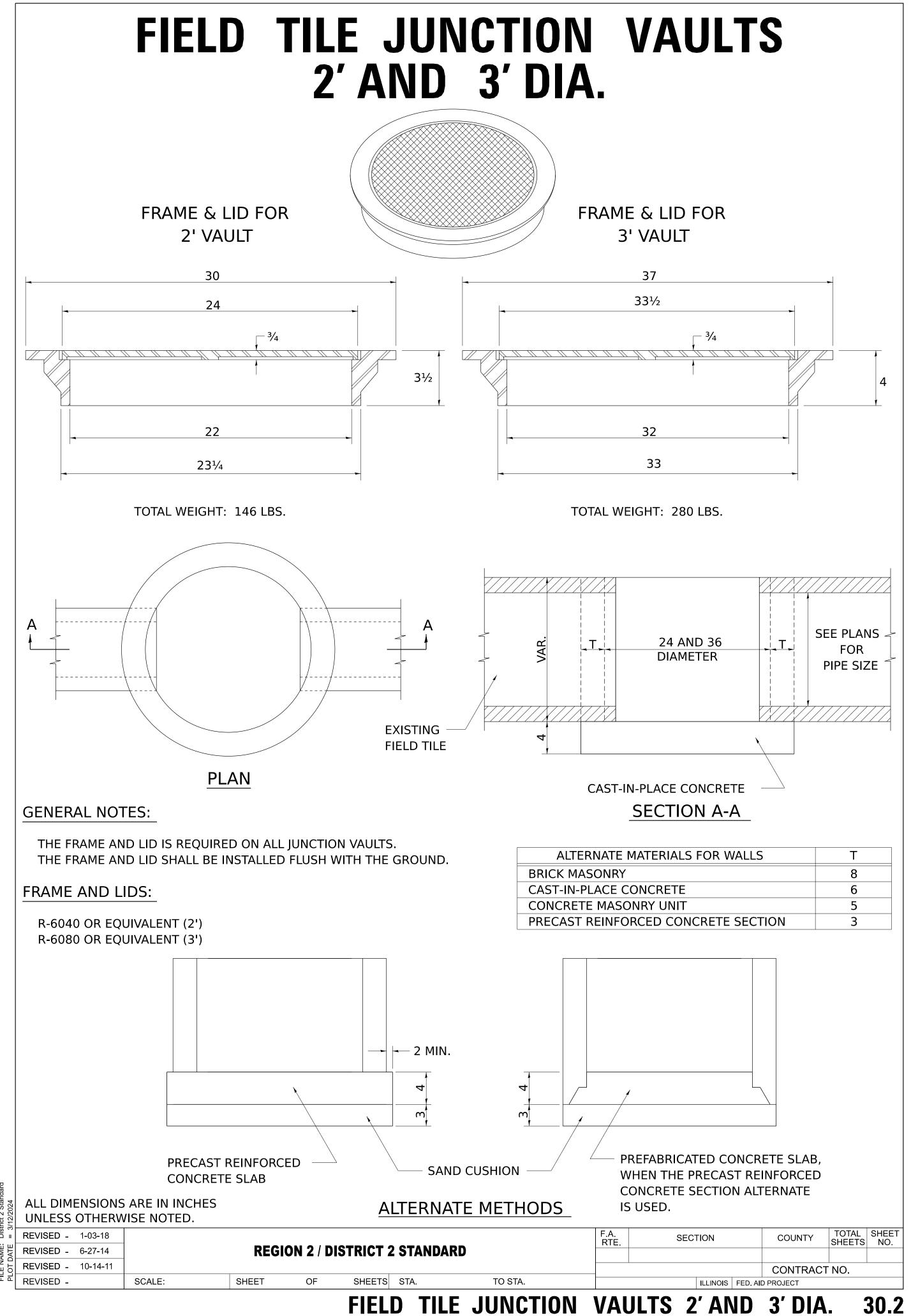
SECTION

COUNTY

CONTRACT NO.

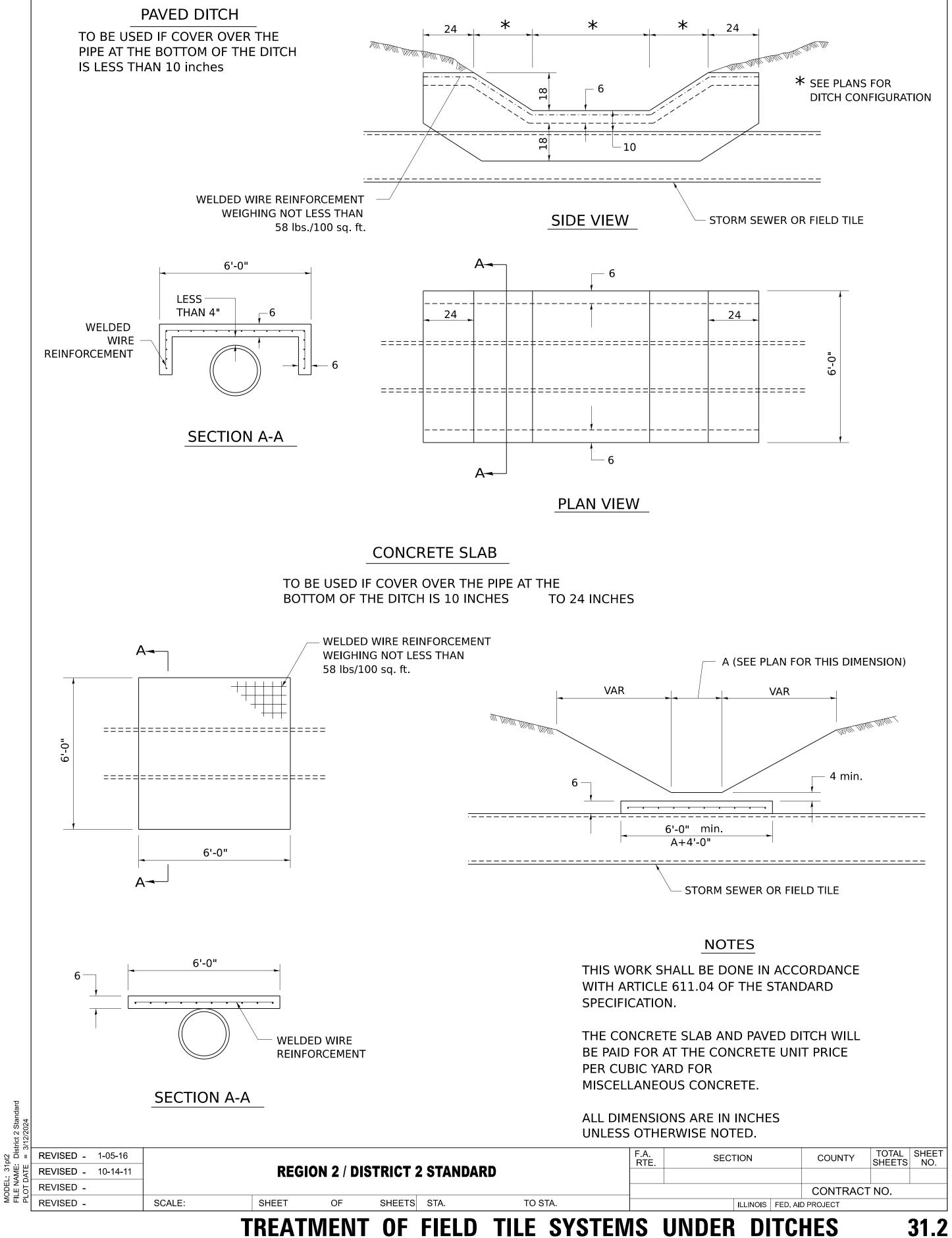
21.2

TOTAL SHEET SHEETS NO.

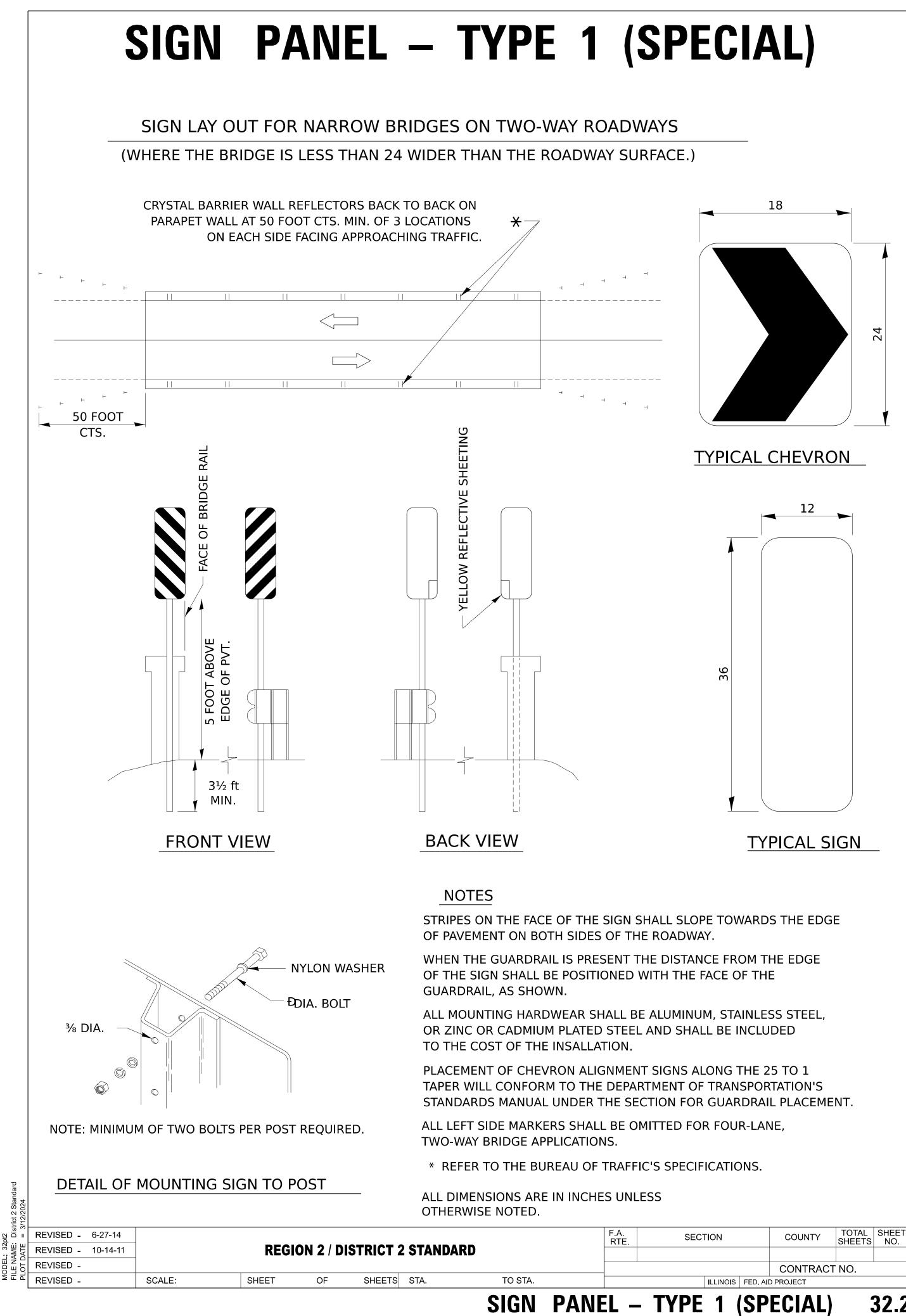


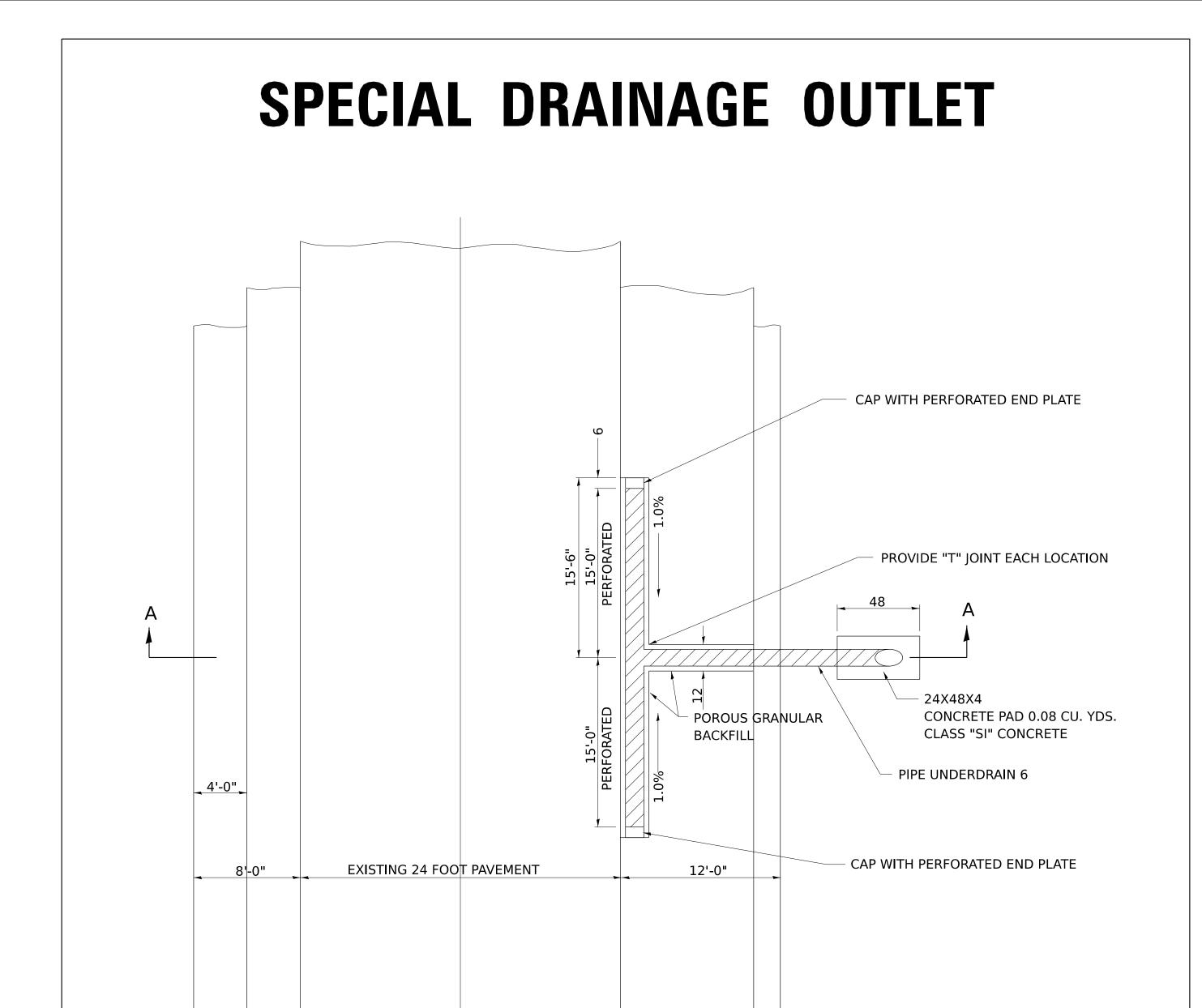
MODEL: 30pt2 FILE NAME: District 2 Stant PLOT DATE = 3/12/2024

TREATMENT OF FIELD TILE SYSTEMS UNDER DITCHES

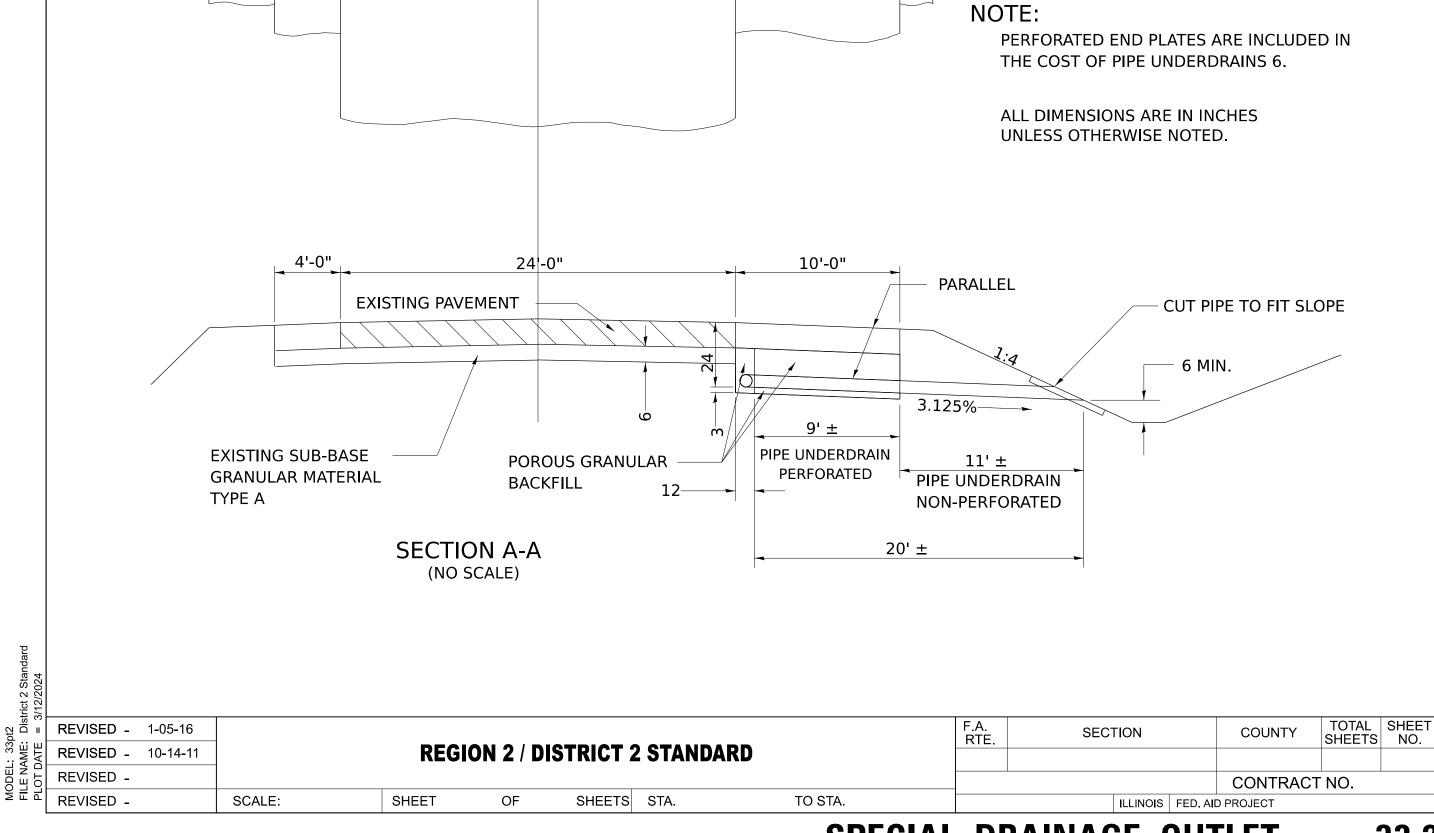


TREATMENT OF FIELD TILE SYSTEMS UNDER DITCHES





SPECIAL DRAINAGE OUTLET 33.2



INLET STAND PIPE

Inlet Stand Pipe

Inlet Stand Pipe shall be included in the contract unit price per FOOT for STORM SEWERS (SPECIAL) 6". Which shall include the following items--one 36" above ground section with 1" holes, one variable depth below ground section with small holes, one 6" tee section, collars (if needed) and end caps (if needed) as directed by the engineer.

Storm Sewer shall be paid for at the contract unit price per foot for STORM SEWERS (SPECIAL) 6". According to Article 611.04.

Field Tile Junction Vault shall be constructed according to District

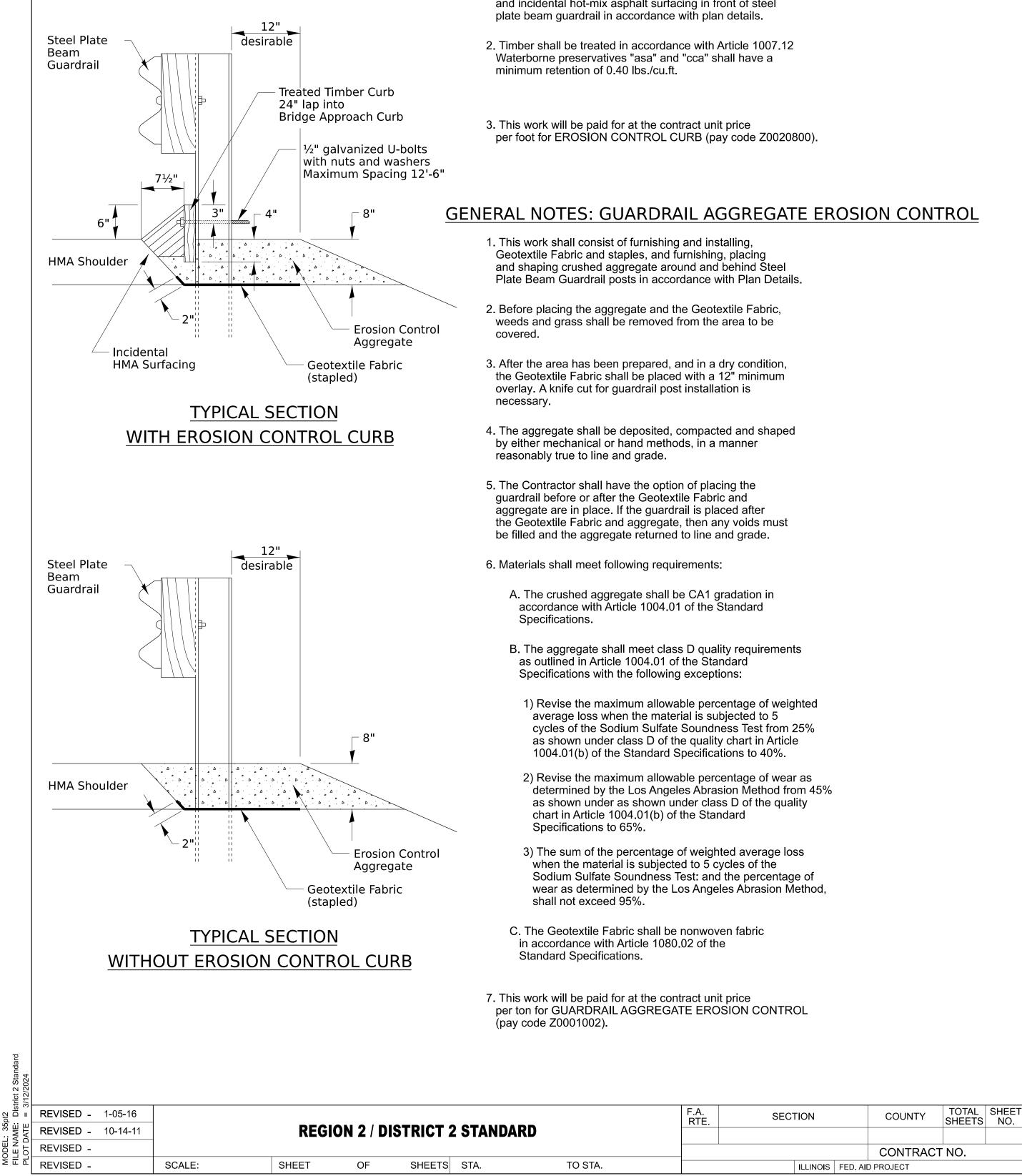
Standard 30.2 and paid for at the contract unit price each for FIELD TILE • JUNCTION VAULTS for size specified in • 6" TILE (ORANGE COLOR) W/ 1" HOLES the plans. Ó 36" • GROUND LINE Ó • ſ∙ ∳ ٠

INLET STAND PIPE 34.2

MODEL: 34pt2 FILE NAME: District 2 Standard PLOT DATE = 3/12/2024		* VARIF	Y DEPTH IN FIELD				
	* VARIABLE	6" SPECIAL TEE		M SEWERS (SPECIAL) 6" PLANS FOR LENGTH)	FIELD TILE JUNCTION VAU	νLT	

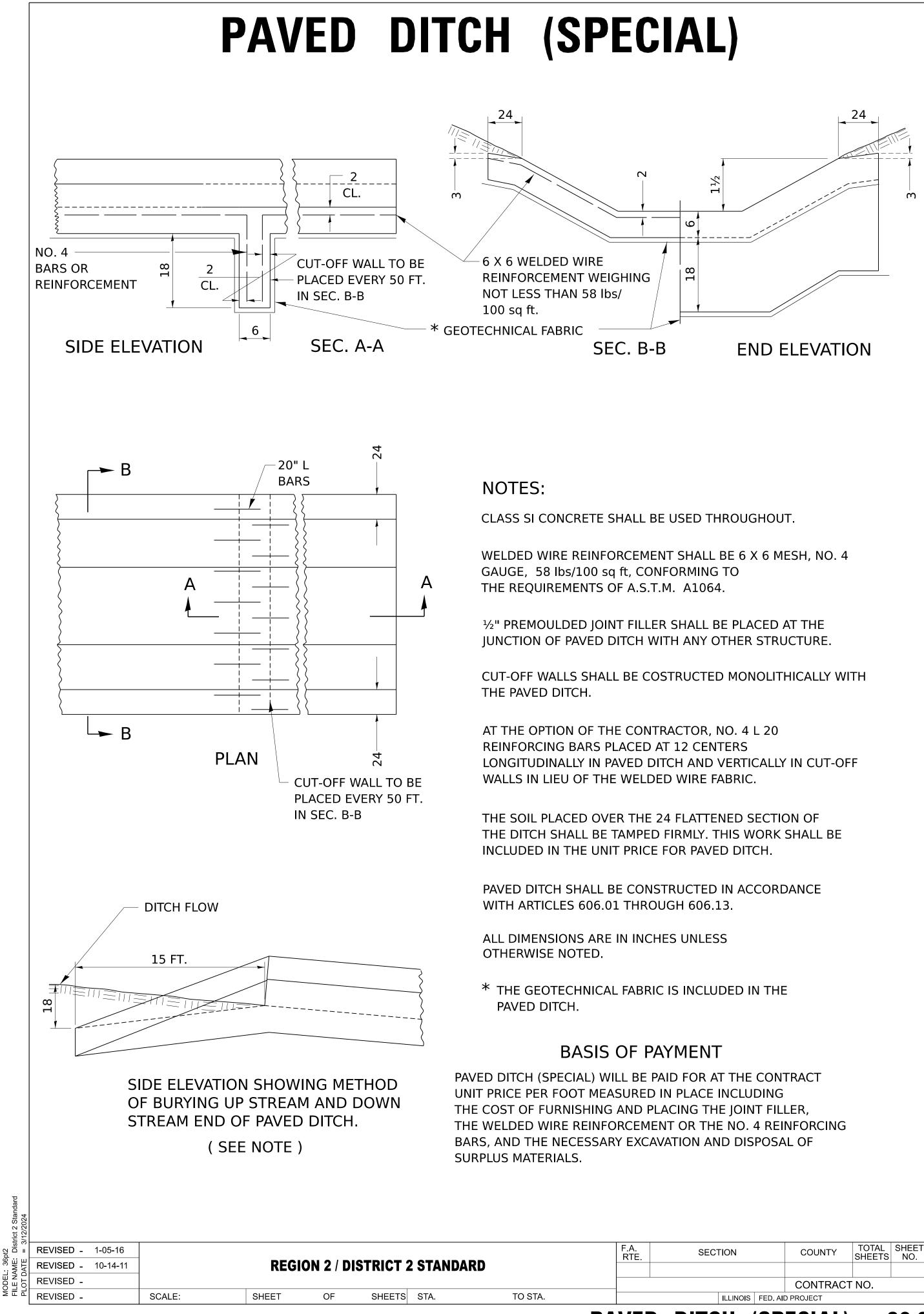
GUARDRAIL EROSION CONTROL TREATMENTS





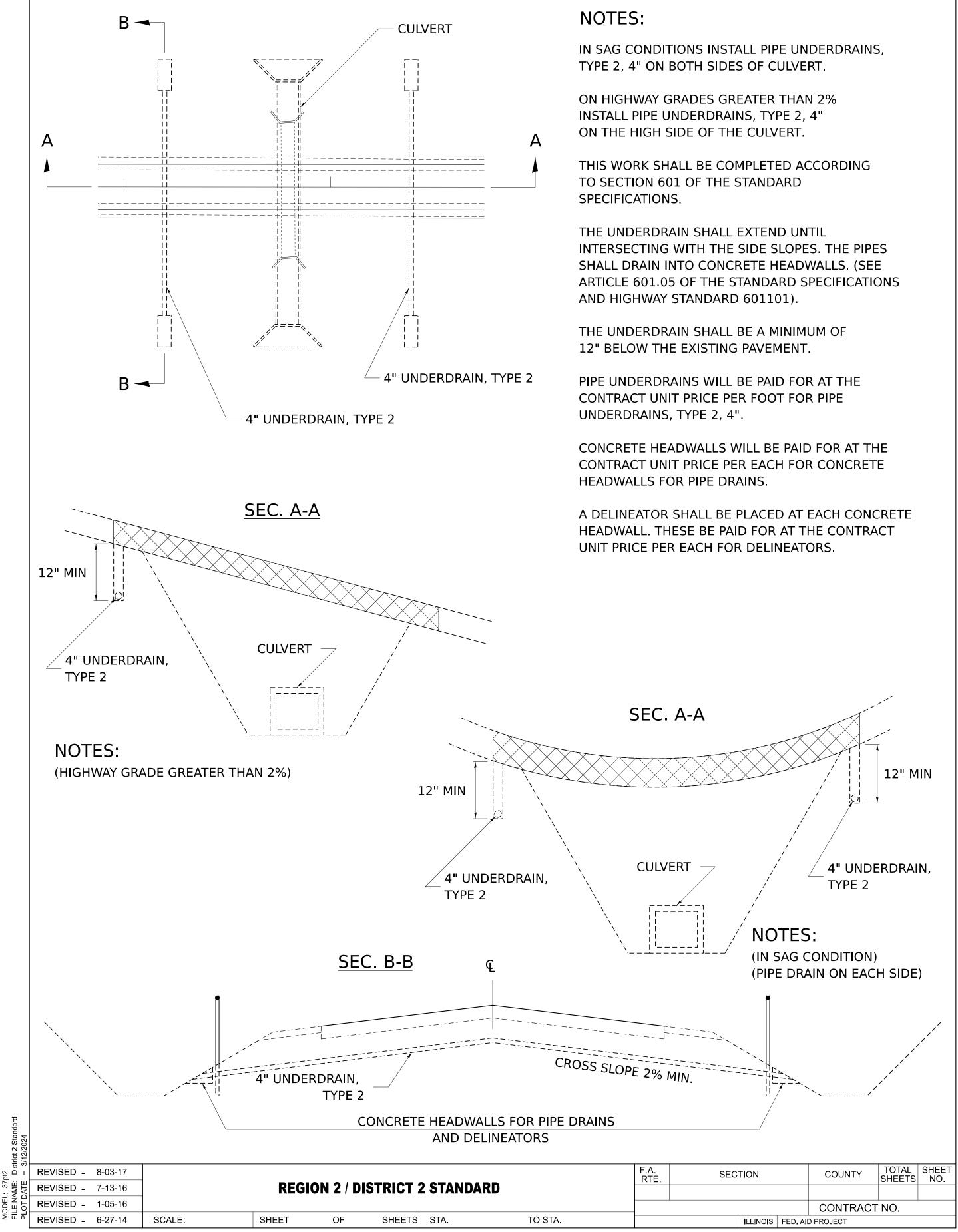
- 1. This work shall consist of grading as needed, installing hardware, 2" x 10" treated timber boards and incidental hot-mix asphalt surfacing in front of steel

GUARDRAIL EROSION CONTROL TREATMENTS

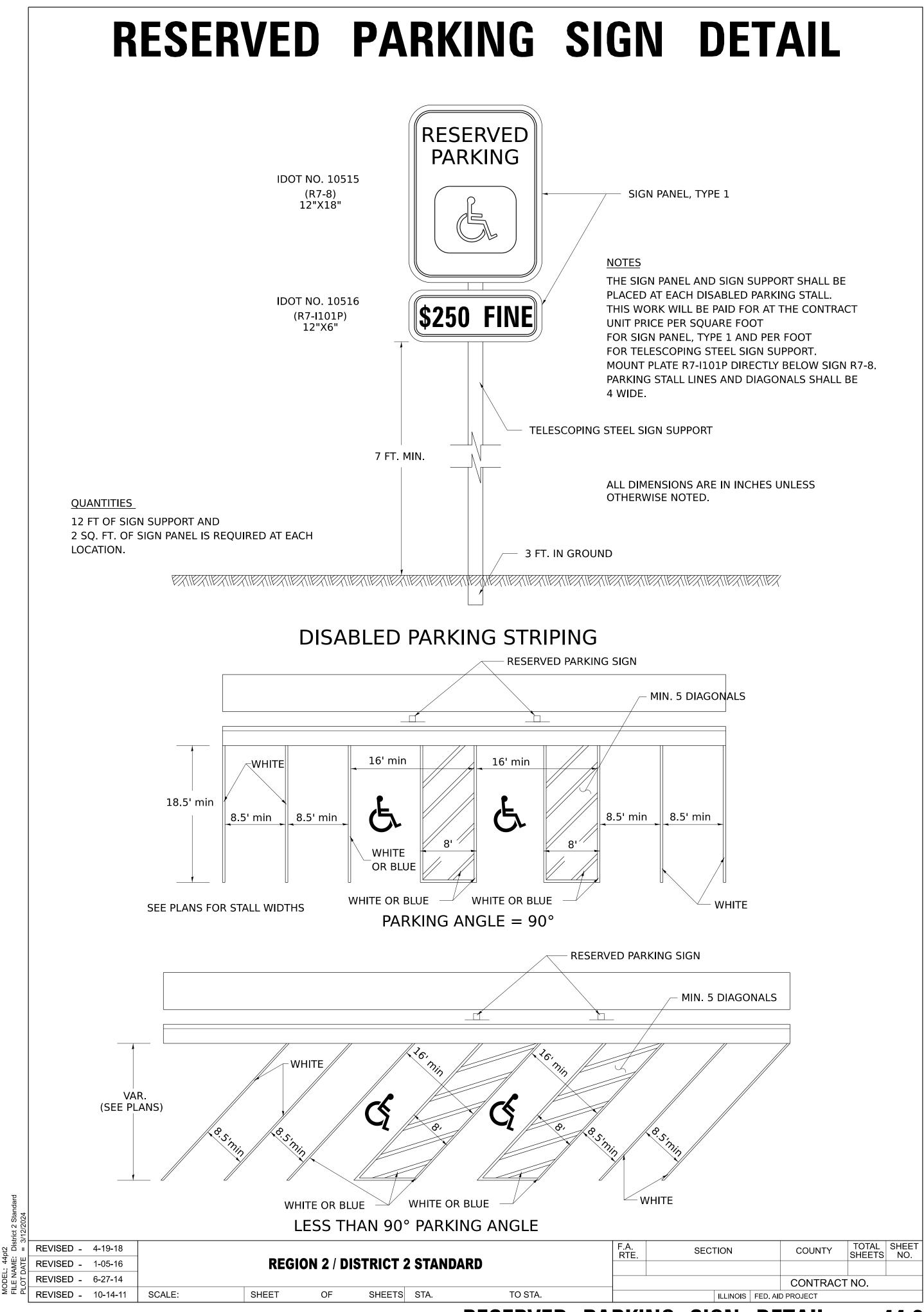


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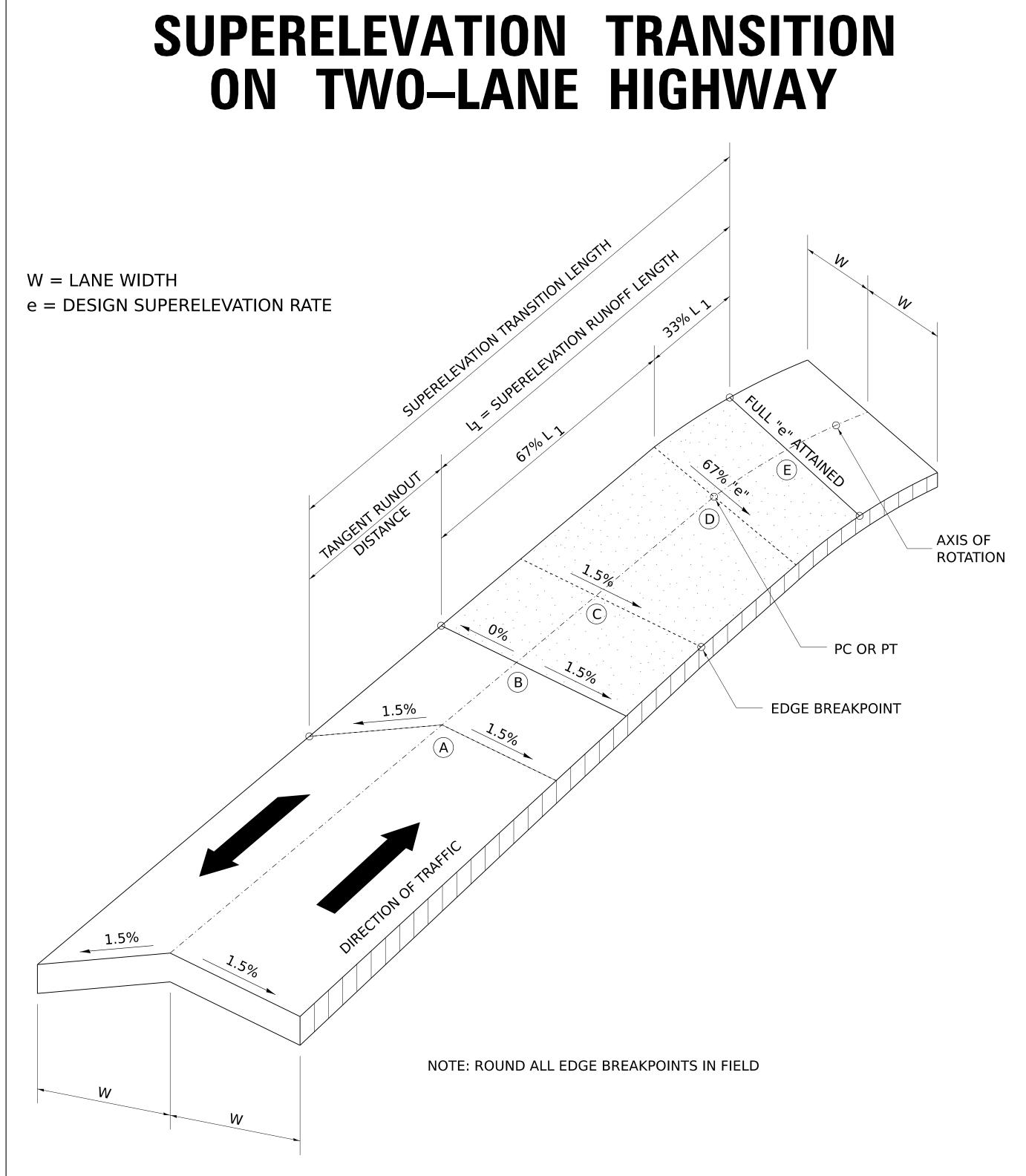
UNDERDRAIN FOR ACROSS ROAD (AR) CULVERTS



UNDERDRAIN FOR ACROSS ROAD (AR) CULVERTS 37.2



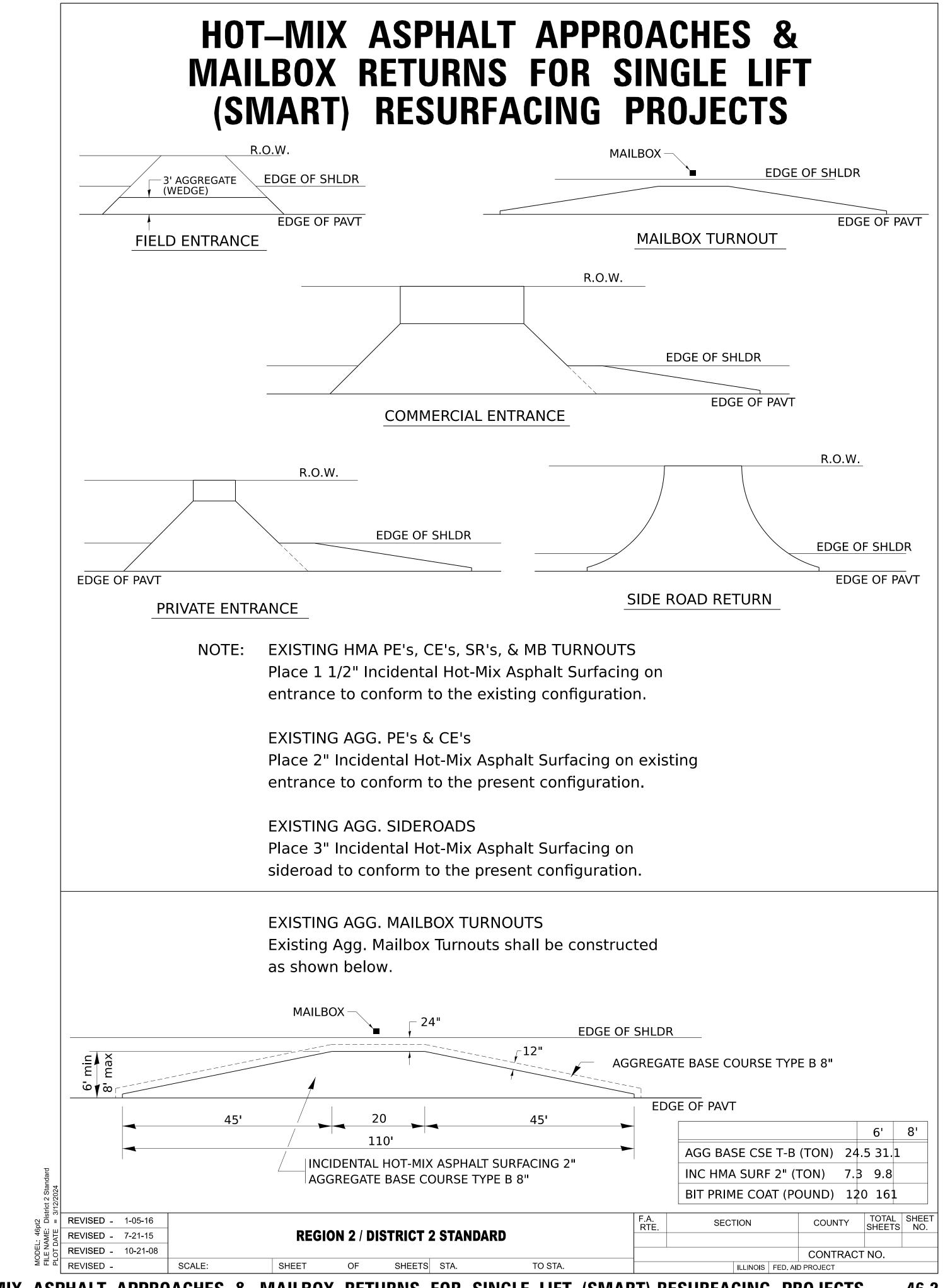
RESERVED PARKING SIGN DETAIL



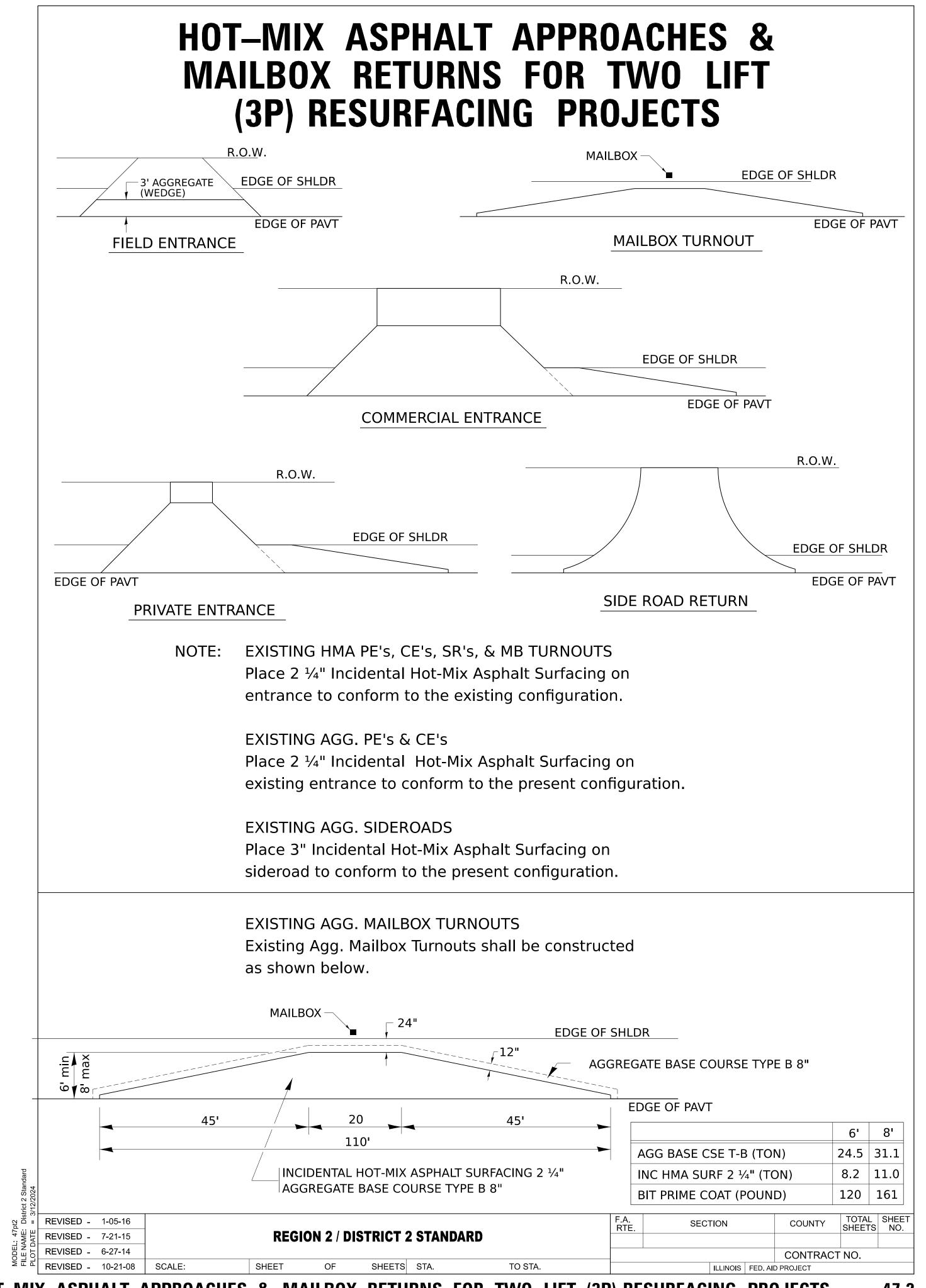
SUPERELEVATION TRANSITION ON TWO-LANE HIGHWAY 45.2

			URVE STA.	SUPERELEVA "e"	ATION	w N	Ι	SUPERELEVATION TRANSITION LENGTH		ENT RUNOUT DISTANCE		RELEVATIO DFF LENGTH	
 District 2 Standard = 3/12/2024													
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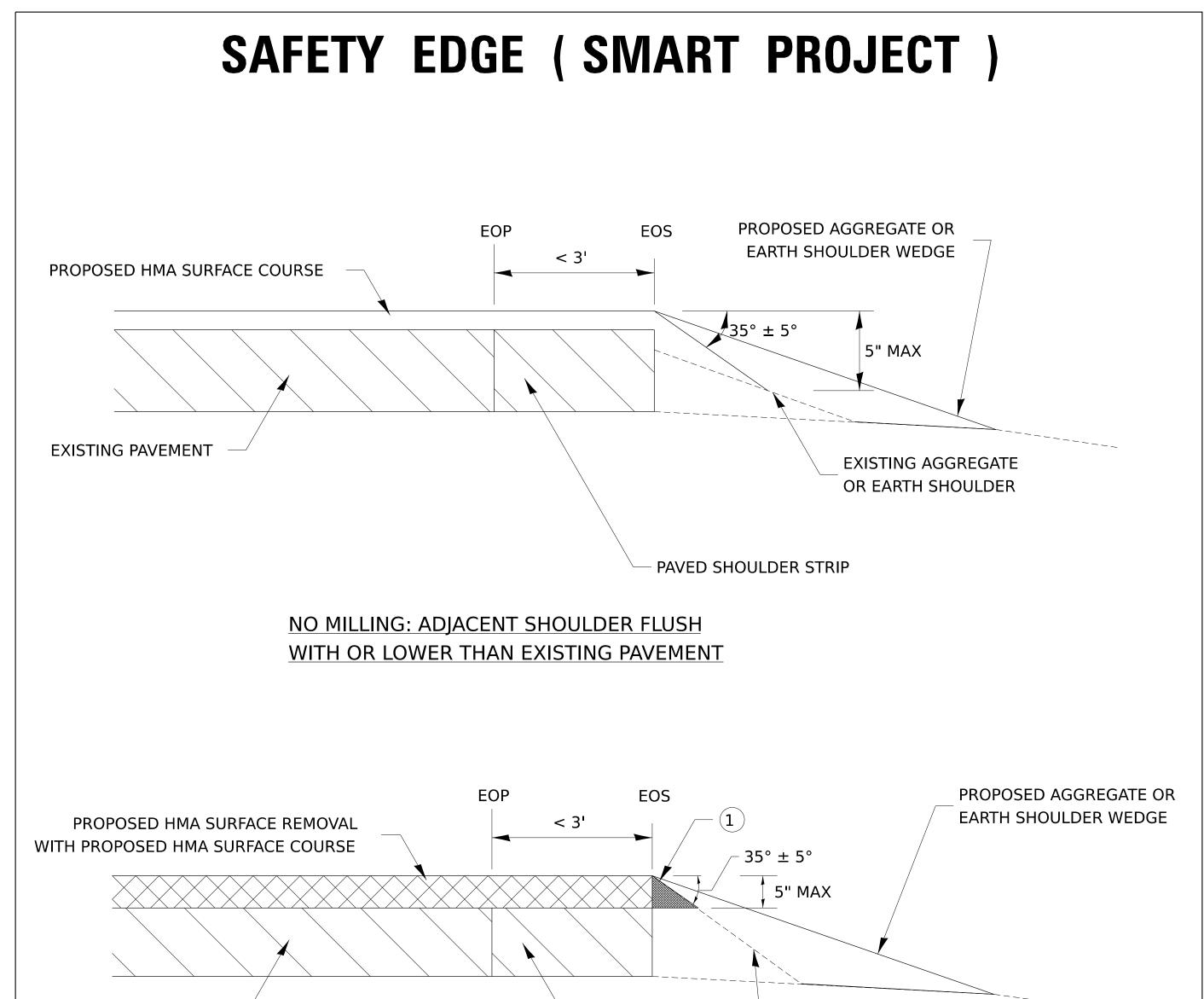
TRANSITION CURVE TABLE



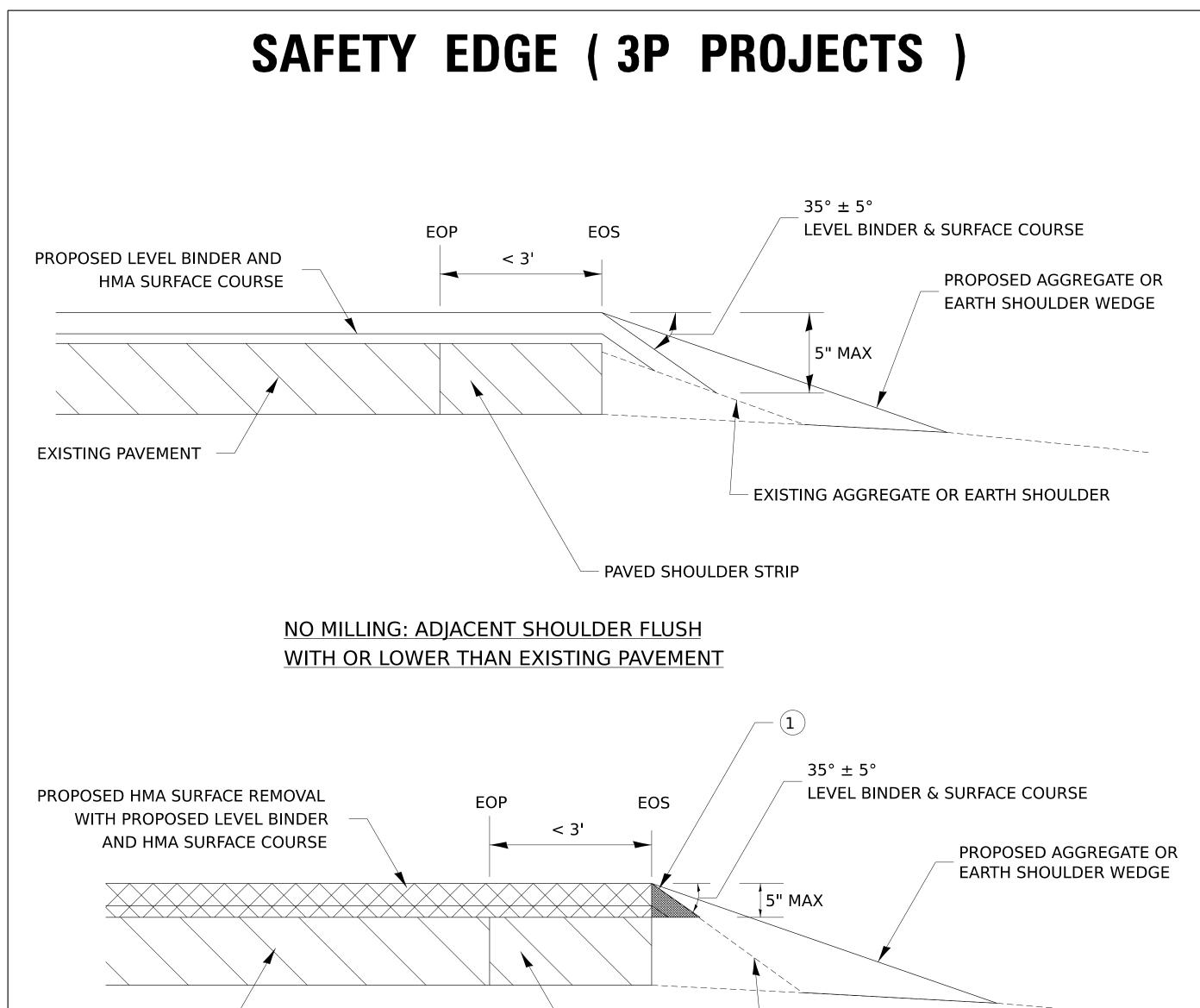
HOT-MIX ASPHALT APPROACHES & MAILBOX RETURNS FOR SINGLE LIFT (SMART) RESURFACING PROJECTS 46.2



HOT-MIX ASPHALT APPROACHES & MAILBOX RETURNS FOR TWO LIFT (3P) RESURFACING PROJECTS 47.2

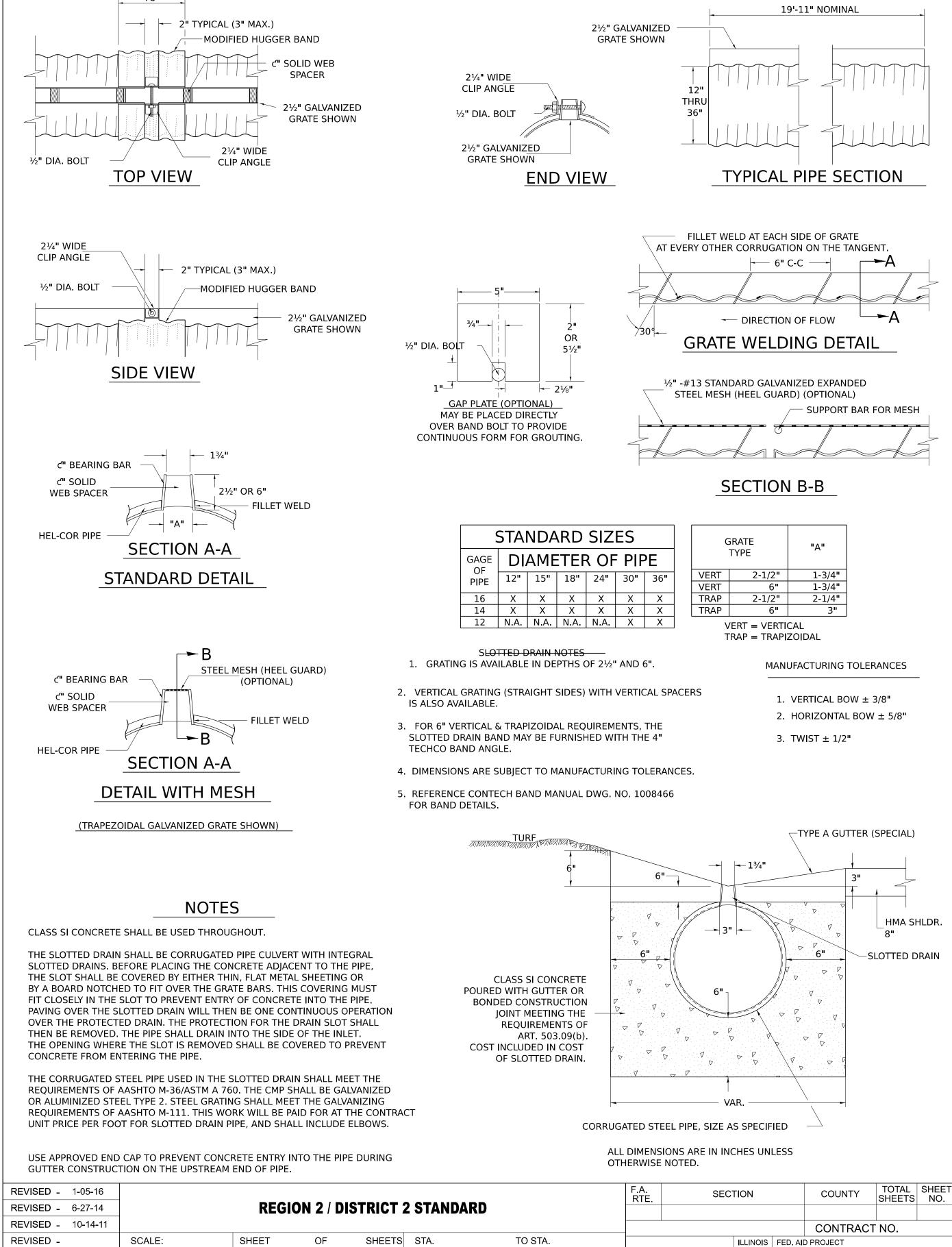


EXISTING P	AVEMENT —				EXISTING AGGREGATE OR EARTH SHOULDER		
			ADJACENT SHOUL AN MILLED SURFAC		<u>⊣</u>		
	THE DEVICE WHICH E MOUNTED ON THE ND GATE AND SHAN O BE LIFTED WHEN E DESIGNED TO MA OF THE SHOULDER A RANSITION TO CRO DESTRUCTIONS. THE THE HMA MATERIAL CONSOLIDATION OF OF A CONVENTIONA IOT BE ALLOWED.	HE PAVER SCREED A LL BE REMOVABLE I NOT IN USE. THE I AINTAIN CONTACT V AND ALLOW AUTOM DSS ROADS, DRIVEV E DEVICE SHALL AL AND INCREASE THI THE EXTRUDED PR	AGAINST THE OR BE ABLE DEVICE SHALL WITH SURFACE MATIC WAYS AND SO CONSTRAIN E ROFILE. THE USE	EDGE, IF T SHOULDER THE AREA SAFETY ED THE MILLE BY THE EN INCLUDED	THE PLACEMENT OF THE H HE ADJACENT AGGREGATE IS HIGHER THAN THE MIL REQUIRED FOR PLACEMEN OGE SHALL BE BROUGHT FI D SURFACE IN A MANNER A GINEER. THIS WORK SHALL IN THE CONTRACT UNIT PR MIX ASPHALT SURFACE COU IFIED.	OR EARTH LED SURFACE, IT OF THE LUSH WITH APPROVED L BE CONSIDERED RICE PER TON	
ict 2 Standard 12/2024	OLLERS WILL NOT OF THE SAFETY EDG		HE SLOPED FACE				
Here April Here 1984 Bistrict 2 Standard 1984 Bistrict 2 Standard 3/12/2024 PLOT DATE 3/12/2024 BILOT DATE 3/12/2		REGION 2 / D	SHEETS STA.	TO STA.	F.A. SECTION	CONTRACT NC	DTAL SHEET EETS NO.
KEVISED -	JUALE:				GE (SMART PR	FED. AID PROJECT	48.2



EXISTING PAVEMEN	т —				-	AGGREGATE I SHOULDER		· — — — .
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		VITH ADJACEN HIGHER THAN						
BE MOU END GA TO BE L BE DESI OF THE TRANSIT OBSTRU THE HM CONSOI OF A CO	VICE WHICH FORMS THE S NTED ON THE PAVER SCE TE AND SHALL BE REMOV IFTED WHEN NOT IN USE GNED TO MAINTAIN CON SHOULDER AND ALLOW A TON TO CROSS ROADS, E ICTIONS. THE DEVICE SHA A MATERIAL AND INCREA IDATION OF THE EXTRUE INVENTIONAL SINGLE PLA ALLOWED.	REED AGAINST TH /ABLE OR BE ABL . THE DEVICE SH/ TACT WITH SURF/ AUTOMATIC DRIVEWAYS AND ALL ALSO CONST .SE THE DED PROFILE. THE	HE E ALL ACE RAIN E USE	EDGE, IF TH SHOULDER THE AREA F SAFETY EDO THE MILLED BY THE ENO INCLUDED I	IE ADJACEN IS HIGHER T REQUIRED FO GE SHALL BE SURFACE II SINEER. THIS N THE CONT IX ASPHALT	ENT OF THE HM T AGGREGATE O THAN THE MILLE OR PLACEMENT E BROUGHT FLU N A MANNER AP 5 WORK SHALL E TRACT UNIT PRIC SURFACE COUR	OR EARTH ED SURFACE, OF THE ISH WITH PROVED BE CONSIDEF CE PER TON	RED
	S WILL NOT BE ALLOWED SAFETY EDGE.	ON THE SLOPED) FACE					
REVISED - 1-05-16 REVISED - 10-11-13 REVISED -	REGIO	N 2 / DISTRICT 2	STANDARD		F.A. RTE.	SECTION	COUNTY	TOTAL SHE SHEETS N T NO.
REVISED - SC/	ALE: SHEET	OF SHEETS	STA.	TO STA.	FDGF	ILLINOIS FED). AID PROJECT	

SLOTTED DRAIN PIPE FOR TYPE A GUTTER (SPECIAL) 7b"

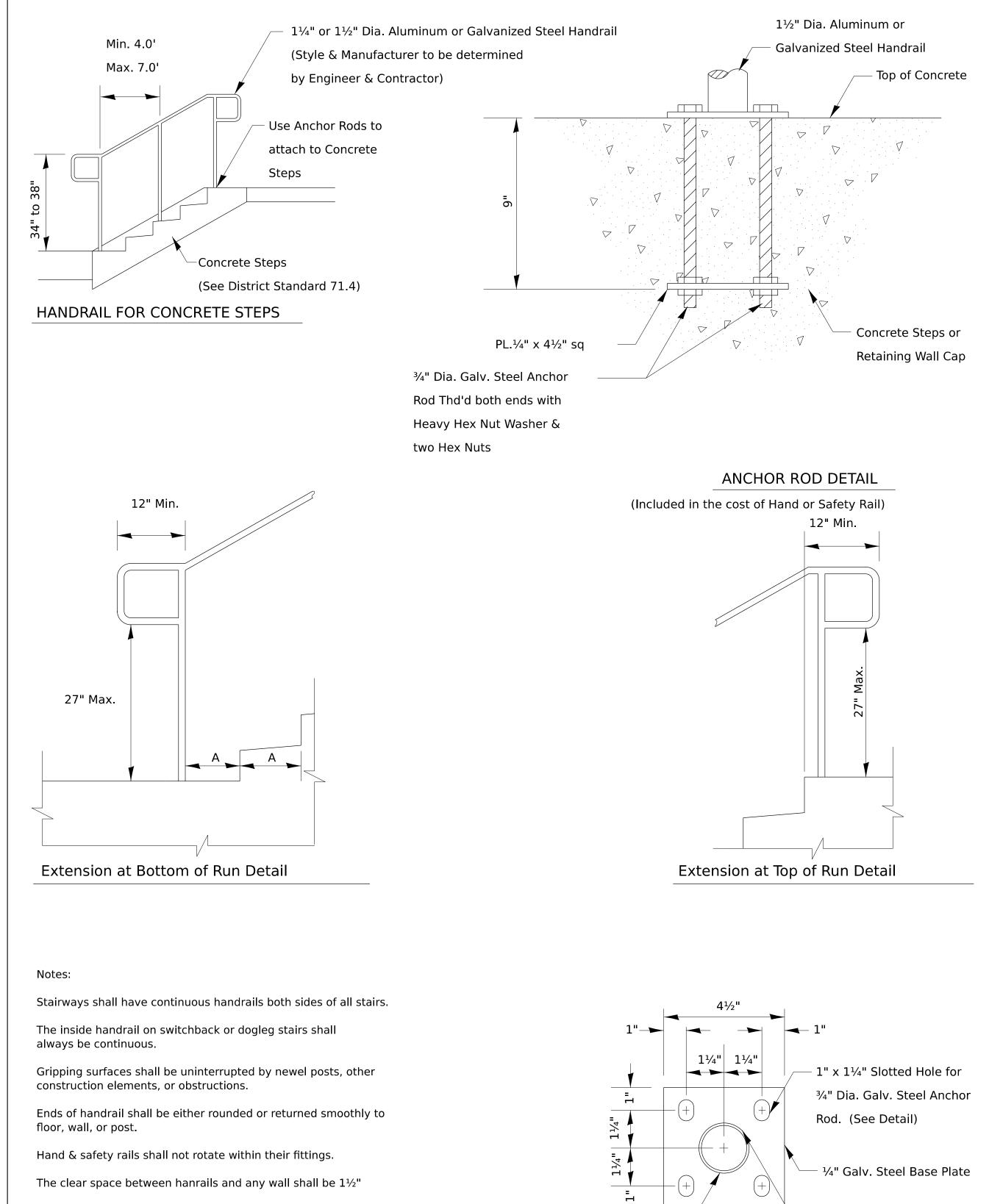


Sta lct 2

MODEL: 61pt2 FILE NAME: Dis

SLOTTED DRAIN PIPE FOR TYPE A GUTTER (SPECIAL) 61.2

PIPE HANDRAILS FOR STEPS



Handrail shall conform to Section 509 with the exception that all pipe and connections shall be welded galvanized or aluminum according to Article 1006.30, or 1006.34.

The diameter of the gripping surface of the handrail shall be 1-1/4" to 1-1/2"

Post 1¹/₂" Dia. Galv. Extra Strong Steel Pipe

63.2

POST BASE PLATE DETAIL

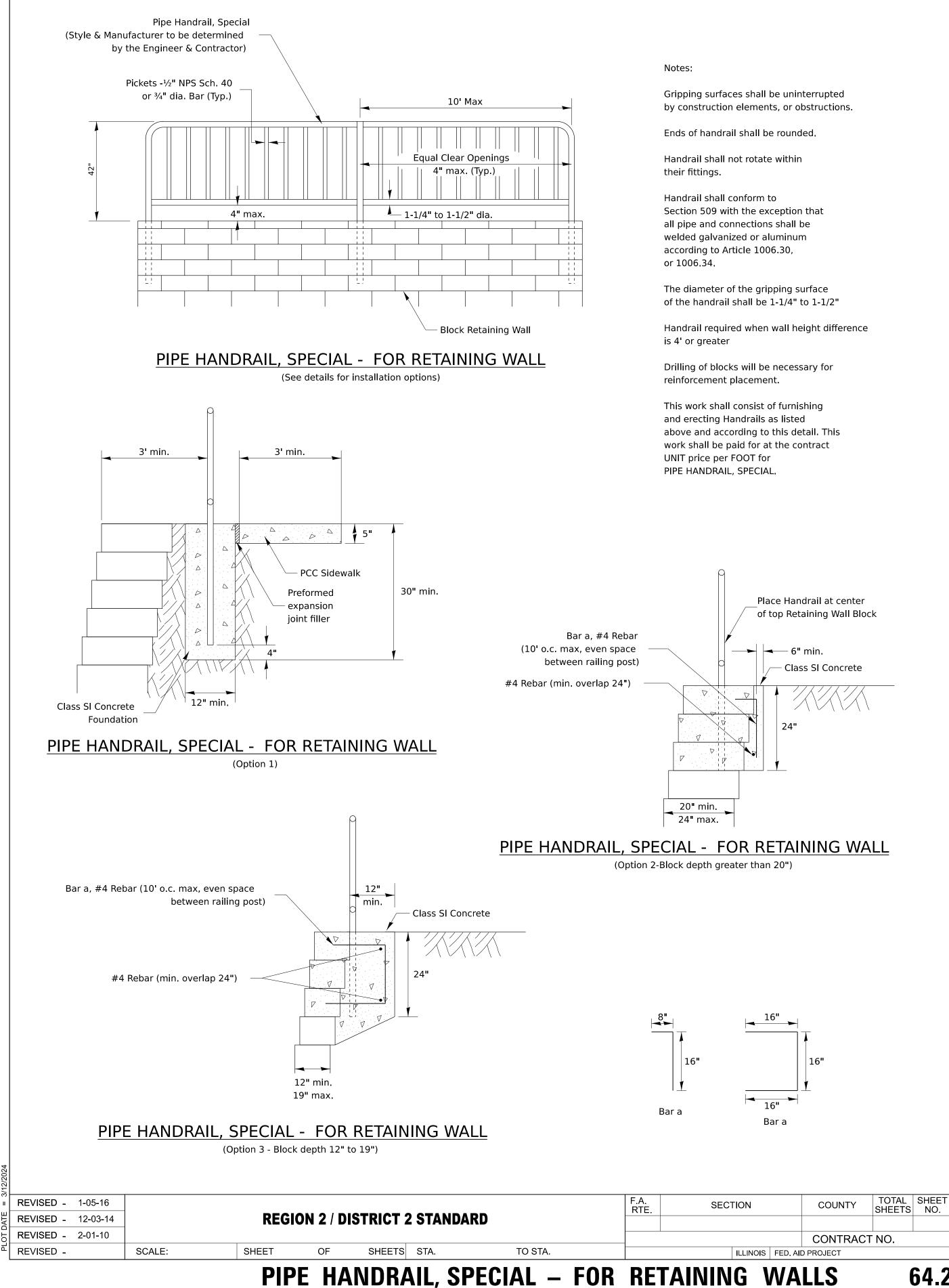
1⁄4"

Weld

q													ļ
ict 2 Standar 12/2024	This work shall be FOOT for PIPE HA		contract unit price	per				(Included in	the cos	st of Hand or Safety Rail)			
pt2 Distr = 3/	REVISED - 1-05-16								F.A. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
03 AME	REVISED - 10-14-11		REGI	ON 2 / D	ISTRICT 2	STANDA	RD					ONLETO	NO.
Model: 63F File Name: Plot date	REVISED -										CONTRAC	T NO.	L
P FII	REVISED -	SCALE:	SHEET	OF	SHEETS	STA.	TO STA.			ILLINOIS FED. AI			

PIPE HANDRAILS FOR STEPS

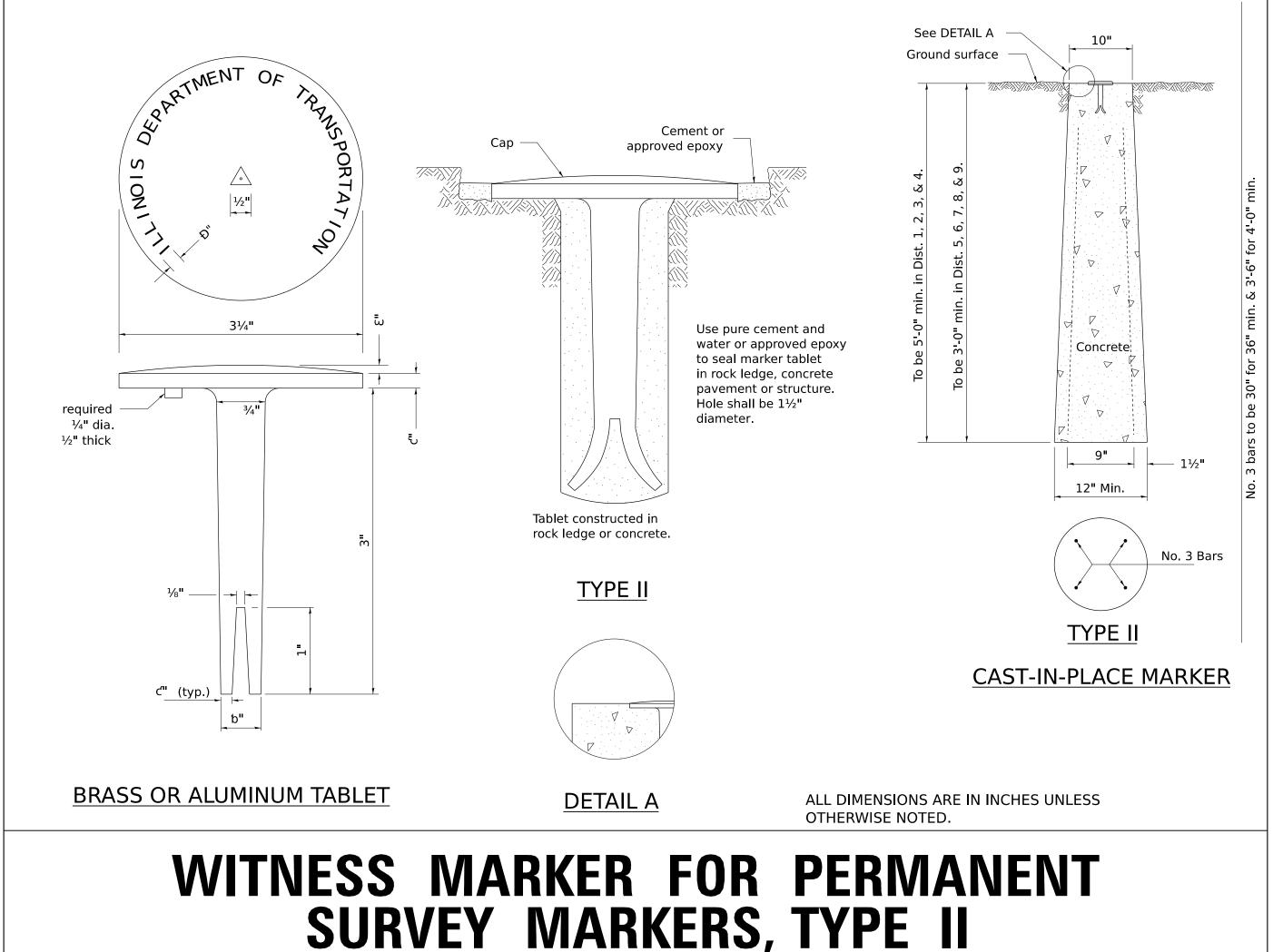
PIPE HANDRAIL, SPECIAL – FOR RETAINING WALLS

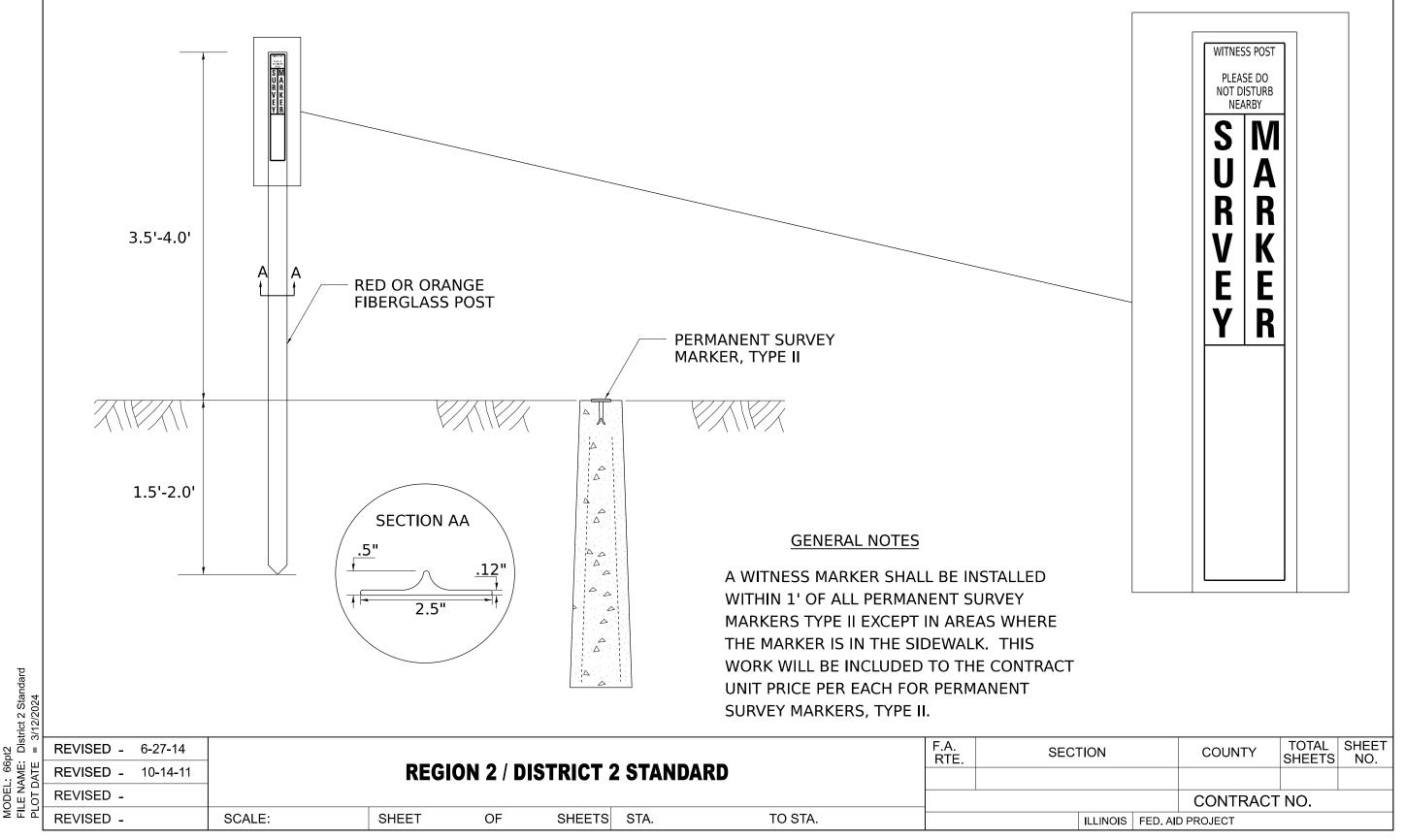


strict 2 Standard

MODEL: 64pt2 FILE NAME: Dis

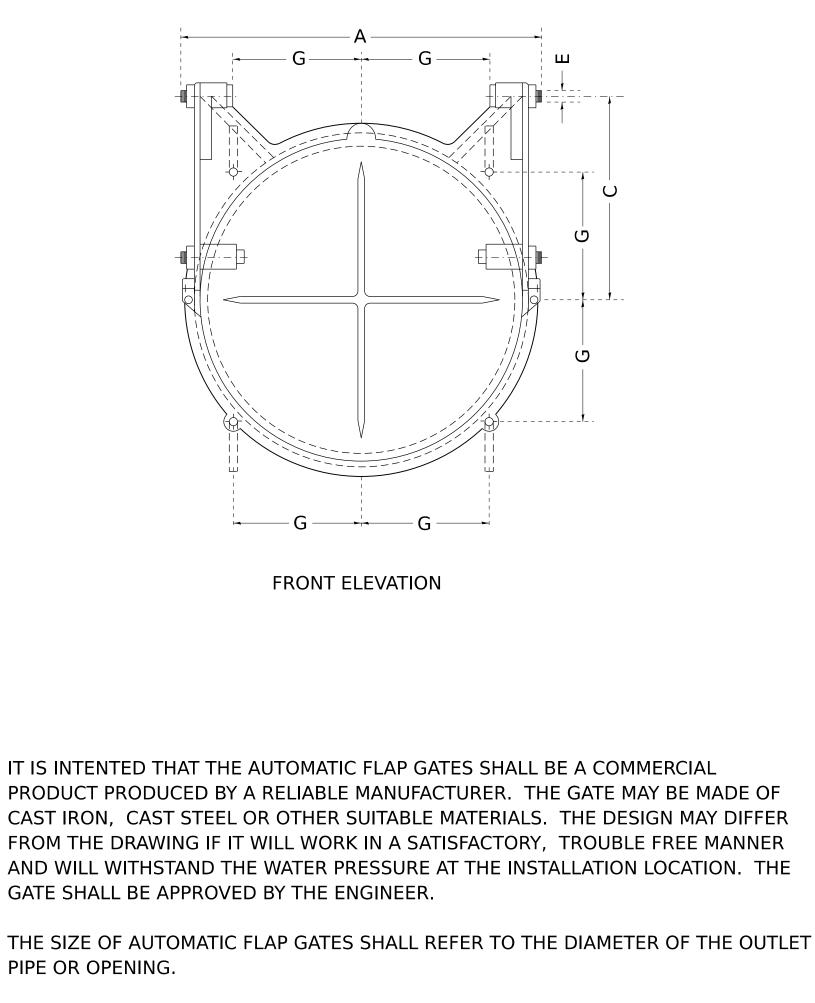
PERMANENT SURVEY MARKERS, TYPE II





PERMANENT SURVEY MARKERS, TYPE II 66.2

AUTOMATIC FLAP GATE



THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR FLAP GATE OF THE SIZE SPECIFIED AND SHALL INCLUDE ALL MATERIALS AND COMPLETE

С

5 d

7 1⁄8

8 ½

9 %

10 %

11 ¼

12 %

14 1/8

14 7⁄8

17

20 ½

25

29 ¾

D

10

12 ¼

14 ½

16 ¾

17 ¾

18 ¾

21

23 ¾

24 ¼

27 ½

34

40 1/8

47

В

1 3⁄8

1 3⁄8

1 3⁄8

1 3⁄8

1 3⁄8

1 3⁄8

2

2

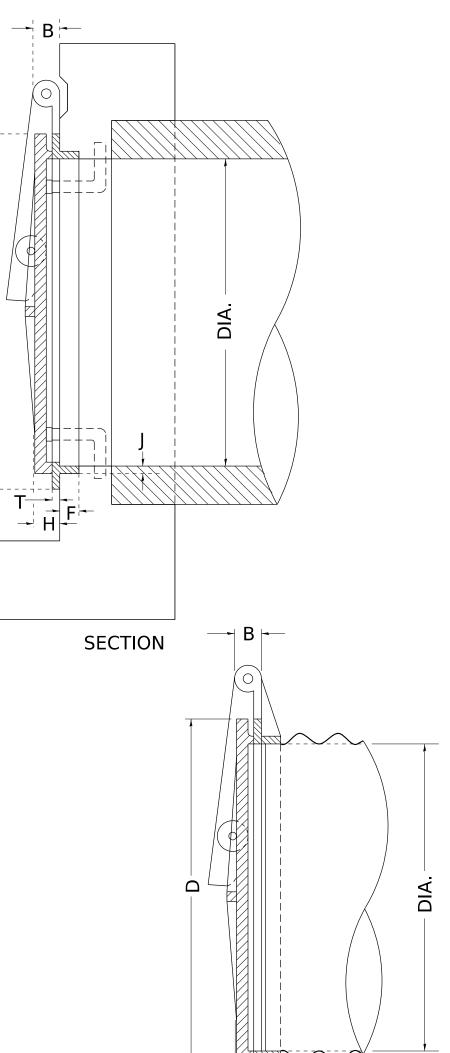
2

2

2 ½

2 ½

2 ½



AUTOMATIC FLAP GATE

	48	53 ½	2 1/2	34	54	1	2 3⁄4	19 Ć	2 1⁄4	1 3⁄8	3⁄4
	54	60 ³ ⁄4	2 1/2	38	62 ¼	1 1/4	2 ³ ⁄ ₄	22	3	1 1/2	7⁄8
	60	67	2 ¹ / ₂	42	68 ½	1 1⁄4	2 ³ ⁄ ₄	24 ¼	3	1 1/2	Е
	66	73 ³ ⁄ ₈	2 1/2	47	75	1 1⁄4	2 1/8	26 ½	3	1 1/2	1
	72	79	2 1/2	51	82	1 1/4	3	29	3	1 1/2	1
dard	78	86	2 1/2	55 ¼	88 3⁄4	1 1/4	3 1/2	31 ³ ⁄ ₈	3	1 5⁄8	1 1/8
strict 2 Stan 3/12/2024	84	92 ½	3 1/2	59 ½	95 ½	1 1/2	3 1/2	33 3⁄4	3	1 3⁄4	1 ¹ ⁄ ₄
MODEL: 73pt2 FILE NAME: District PLOT DATE = 3/12	REVISED - 10-14- REVISED -	11	REG	ION 2 / DISTR	ICT 2 STANDA	RD		F.A. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
ODEL: LE NAI	REVISED -									CONTRAC	T NO.
≊ਜਟੋ	REVISED -	SCALE:	SHEET	OF SH	IEETS STA.	TO ST	Α.		ILLINOIS FED	D. AID PROJECT	
							AUT	OMATIC	FLAP	GATE	73.2

INSTALLATION.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

Α

10 ¾

12 ¾

14 ¾

17 ¼

17 ¾

19 ¼

22 ¼

24 ¾

25 ¼

28 ¼

35 ¼

41 ½

47 ½

DIAM

8

10

12

14

15

16

18

20

21

24

30

36

42

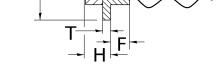


TABLE OF DIMENSIONS

Ε

¹∕₂

¹∕₂

¹∕₂

¹∕₂

⅓

1⁄2

3⁄4

3⁄4

3⁄4

3⁄4

1

1

1

F

1 1⁄8

1 1⁄8

1 1⁄8

1 ¼

1 ¼

1 ¼

1 d

1 ¾

1 3⁄8

1 ½

1 a

2 Ć

2 Đ

G

5δ

4 ¾

5 ½

5 E

6 ¼

6 %

7 D

8 ¼

Б 8

9 ¾

12

14 D

16 %

Δ

SECTION SHOWING METHOD OF APPLICATION TO CORRUGATED METAL PIPE

J

3∕8

1⁄2

¹∕₂

¹⁄₂

1⁄2

¹⁄₂

Б

5⁄8

5⁄8

5⁄8

1 Ć

1 ½

1 1⁄8

Т

3⁄8

D

1⁄2

Б

Б

Б

Б

5⁄8

5⁄8

5⁄8

⁵/8

đ

3⁄4

Η

1 ¼

1 ½

1 ½

1 ½

1 ½

1 1⁄2

1 3⁄4

1 ¾

1 ³⁄4

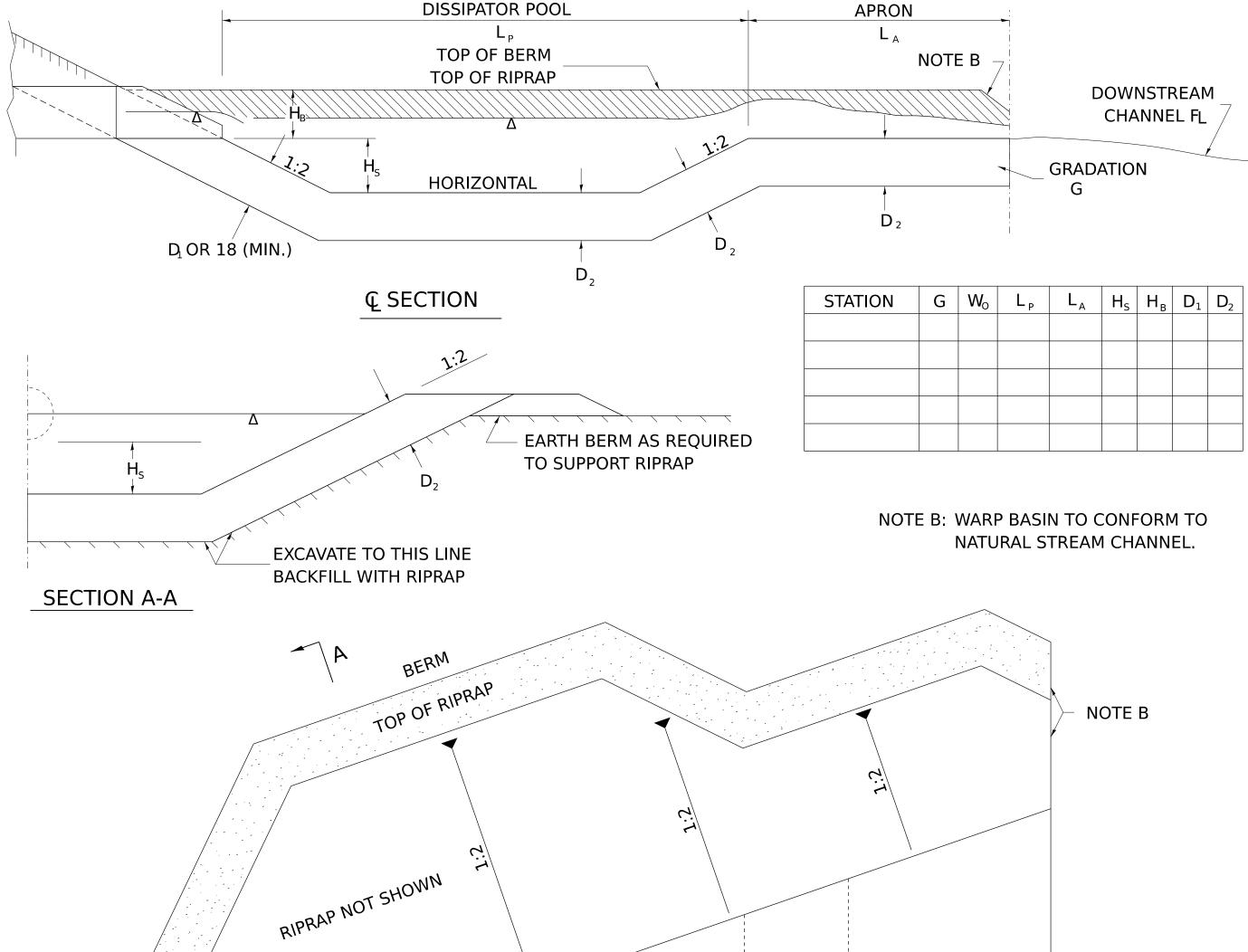
1 ¾

2

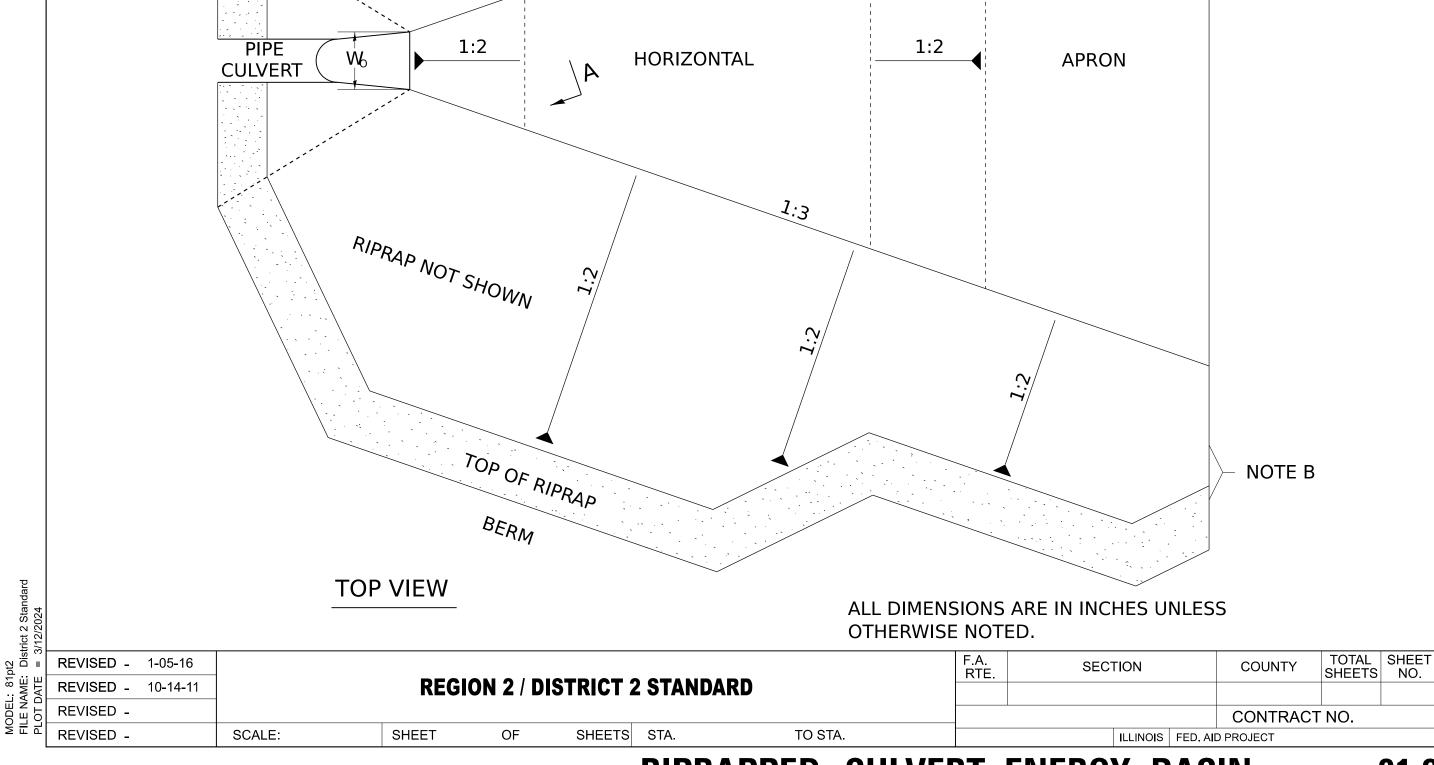
2 ¼

2 ¼

RIPRAPPED CULVERT ENERGY BASIN



RIPRAPPED CULVERT ENERGY BASIN



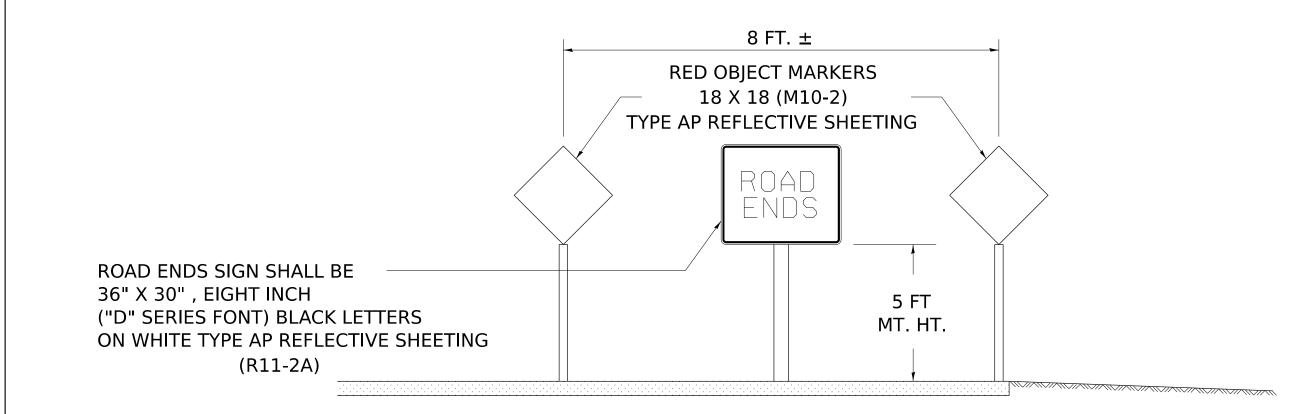
1:3

TERMINATION OF DEAD END ROADS

NOTES: A "NO OUTLET" (36"x36" YELLOW) SIGN SHALL BE ERECTED SLIGHTLY BEYOND THE LAST ROAD INTERSECTING THE ROAD WITH NO OUTLET. IF THIS INTERSECTION IS MORE THAN 1500 FT FROM TERMINATION POINT, OR IF SIGHT DISTANCE TO THE CLOSURE IS LESS THAN 500 FT, A ROAD ENDS 500 FTWB-I6) SIGN SHALL BE ERECTED 500 FT IN ADVANCE OF THE TERMINATION OF THE ROAD. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "TERMINATION OF DEAD END ROADS" WHICH PRICE SHALL INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO INSTALL THE SIGNS AND DELINEATORS.

USE 4X6 WOOD POSTS INSTALLED IN ACCORDANCE WITH SECTION 730 OF STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS. USE APPLICABLE PARTS OF STANDARD 720001 FOR SIGN MOUNTING.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.



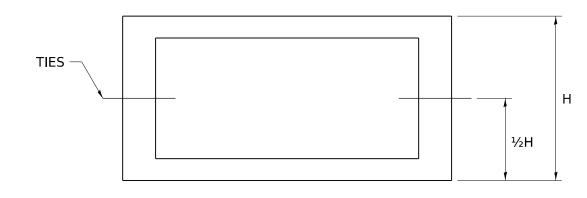
TERMINATION SIGNING

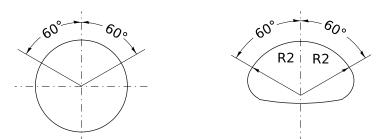
TERMINATION OF DEAD END ROADS 89.2

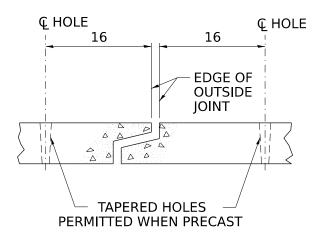
						DELIN	EATORS 0' CTS.)		-O ROAD ENDS Q EXISTIN CROSSRC TYPE I OBJEC MARKERS (R	IG DAD	
					TRAFFIC CO	ONTROL					
PLOT DATE = 3/12/2024					TYPICAL CU	DE-SAC					
Uspuz IE: Distri IE = 3/1	REVISED - 11-12-14 REVISED - 10-14-11		PECIO		TRICT 2 STANDARI		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ULE NAM	REVISED - 10-14-11 REVISED -		REGIU		INIGI Z JIANDAKI	•			CONTRAC	T NO.	
┋╓┛	REVISED -	SCALE:	SHEET	OF	SHEETS STA.	TO STA.			FED. AID PROJECT		

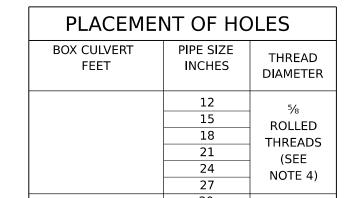
MECHANICAL JOINTS FOR CONCRETE PIPE AND BOX CULVERTS

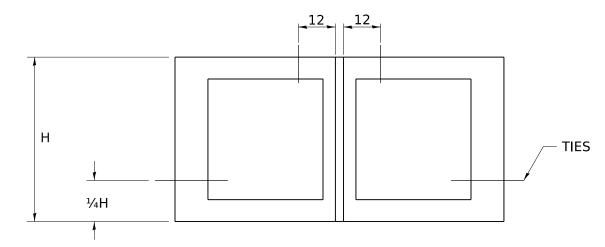
THE CULVERT TIES SHALL BE INCLUDED IN THE COST OF THE CONCRETE PIPE CULVERTS OR THE PRECAST CONCRETE BOX CULVERT. THE MECHANICAL TIES SHALL BE ON THE OUTSIDE OF THE CULVERT. THE NUTS AND WASHERS SHALL BE PLACED ON THE INSIDE OF OF THE CULVERT AND COVERED WITH MASTIC JOINT SEALER CONFORMING TO SECTION 1055 IN THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

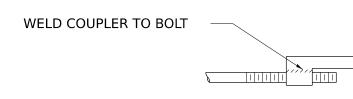




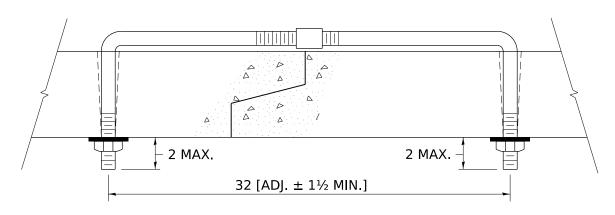




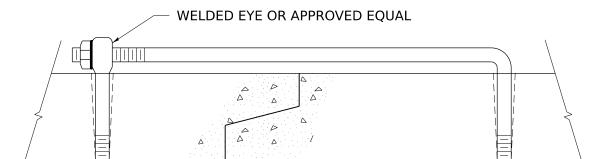




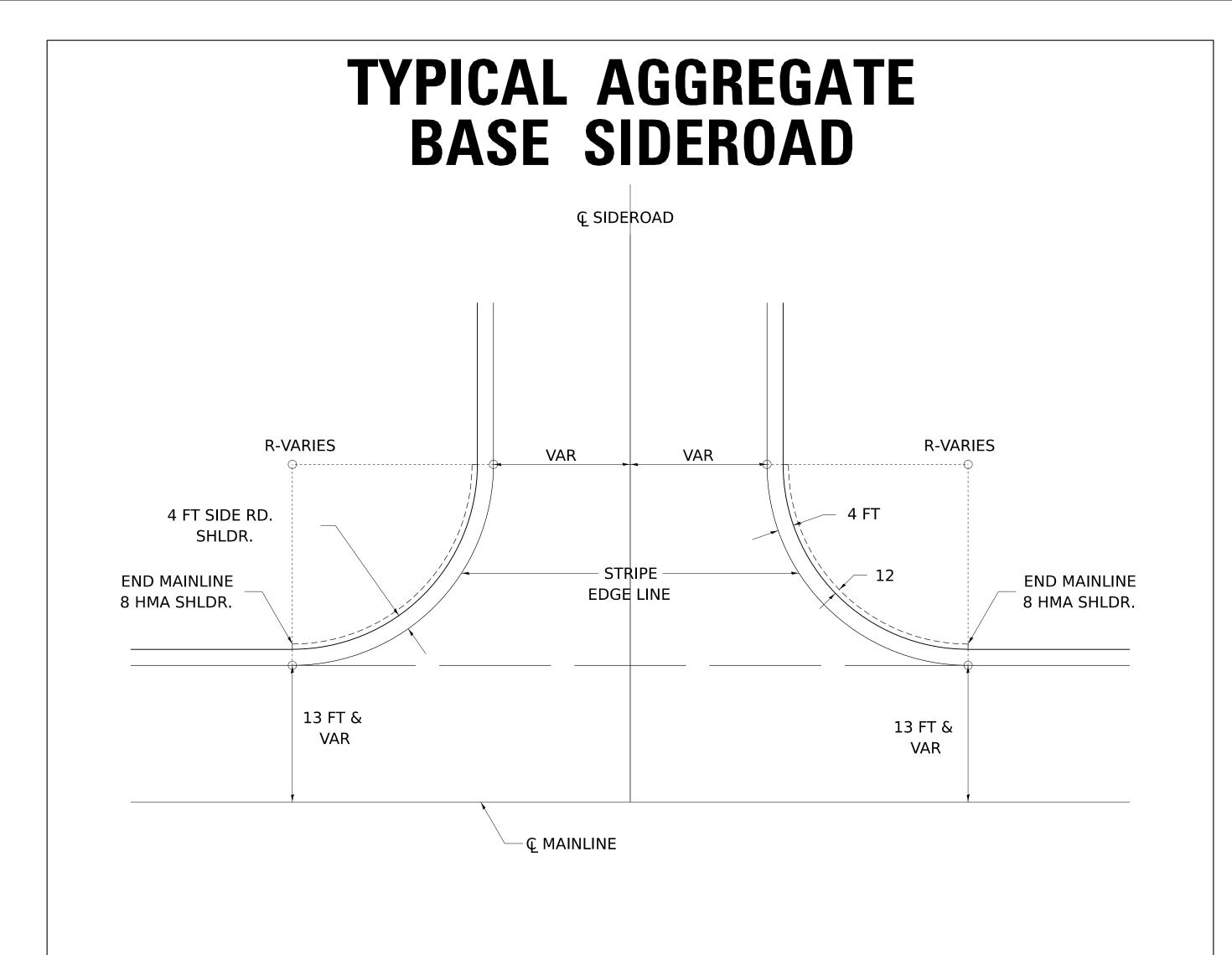


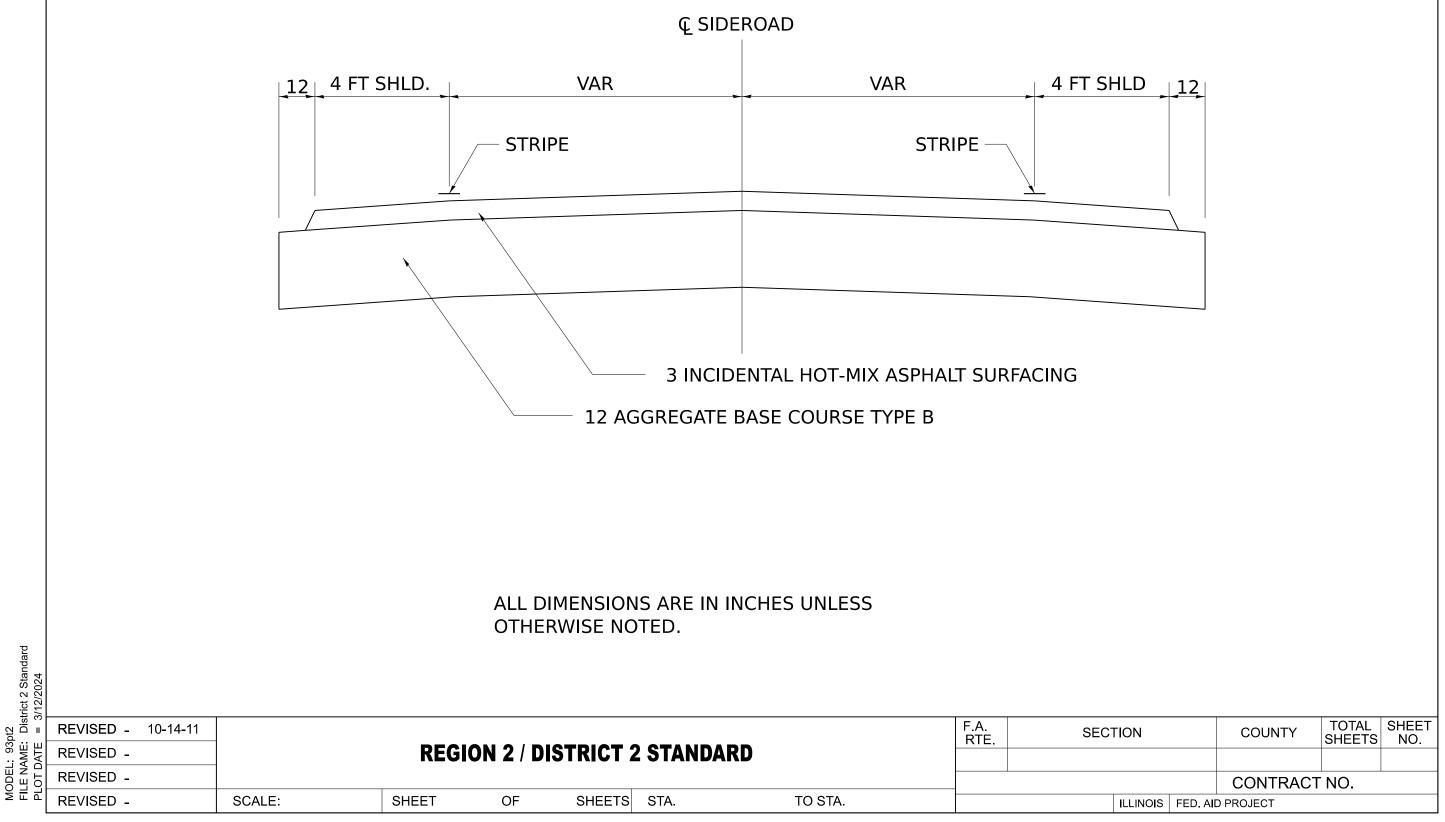


ADJUSTABLE TIE

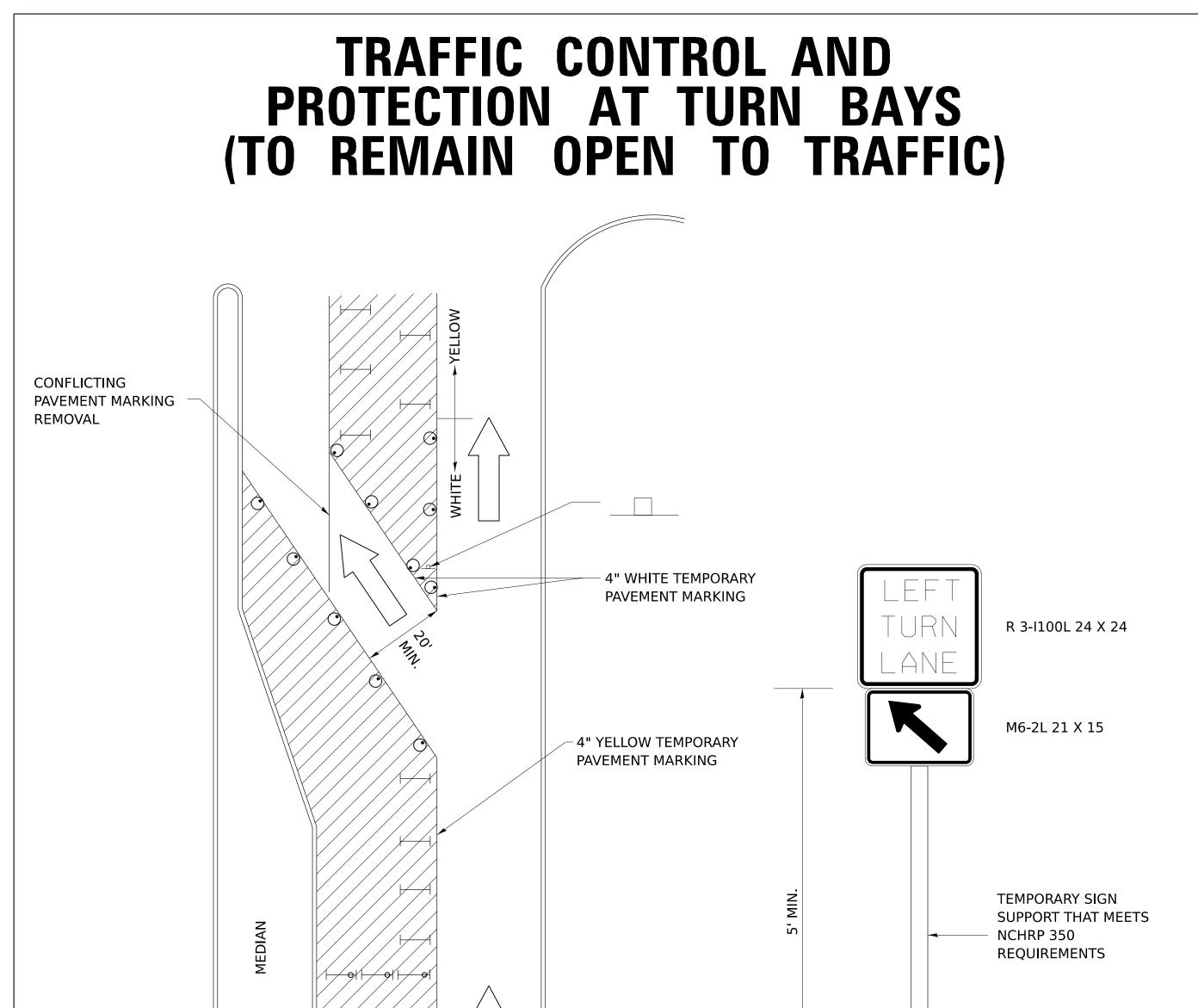


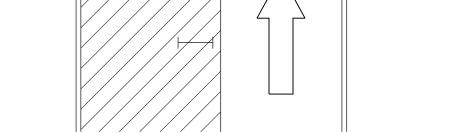
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	33 36 3/2 36 3/2 CU 42 CU 48 OF 54 ROLL 56 72 78 34 390 CU 90 CU 96 OF 102 ROLL	IT R LED IT R				32 [ADJ. ± 1½ M EYE BOLT				
	11 X * 1 AND GREATER AND G	120 132 138 1 ³ /2 REATER				- 2 MAX.	32 [ADJ. ± 1½ M CANOPY				
OF 2 3. TIES SMA FRO 4. CUT ARE 5. PIPE OR E	S AND WASHERS ARE NOT F 7 DIAM. PIPE OR LESS. ARE NOT REQUIRED FOR B LLER. ON OTHER SIZES TIE M INSIDE. THREADS MAY BE USED IF M USED. SIZE LISTED IS INSIDE DIAM QUIVALENT DIAM. OF PIPE /ANIZING OF TIES IS REQUIF	ELL PIPE 24 AN MAY BE INSEF WASHER AND M. OF ROUND ARCH OR ELLI	ND RTED NUT PIPE					2 MAX JCE ACCEPTABL			
	DIMENSIONS ARE IN INCHES ESS OTHERWISE NOTED.	5					U BOLT T	ΊE			
REVISED - 1-05-16 REVISED - 11-12-14			1 2 / DI	STANDARD		F.A. RTE.	SEC	TION	COUNTY	TOTAL SHEETS	SHEE NO





TYPICAL AGGREGATE BASE SIDEROAD





strict 2 Standard



SHEET NO.

	LEGEND		GENERAL NOTES			
	WORK AREA	CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 IN HEIGHT.				
		STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS WILL BE MONODIRECTIONAL.				
	LANE OPEN TO TRAFFIC	TEMPORARY PAVEMENT MARKING SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.				
	TYPE I OR II BARRICADE OR DRUM WITH FLASHING BURNING LIGHT	THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 X 24 AND M6-2R 21 X 15				
	DRUM OR BARRICADE WITH STEADY BURN LIGHT	THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.				
	SIGN (SEE DETAIL)					
	TYPE I OR II CHECK BARRICADE WITH STEADY LIGHT BURN	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.				
		ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.				
REVISED - 10-14-11			F.A. SECTION	COUNTY	TOTAL SHEETS	
REVISED -	REGION 2 / DISTRICT 2 STAN	DARD				
REVISED -				CONTRAC	T NO.	
REVISED -	SCALE: SHEET OF SHEETS STA.	TO STA.	ILLINOIS FED	. AID PROJECT		

Traffic Control and Protection at Turn Bays (To Remain Open to Traffic) 94.2